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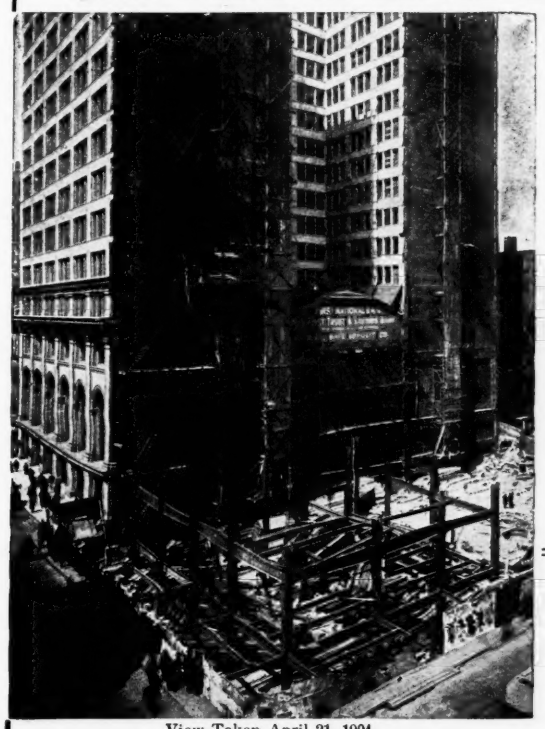

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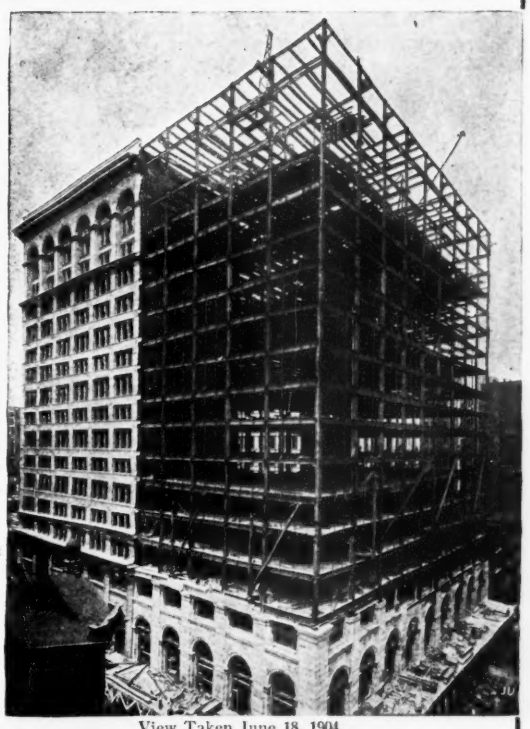

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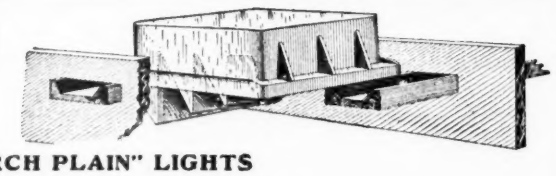

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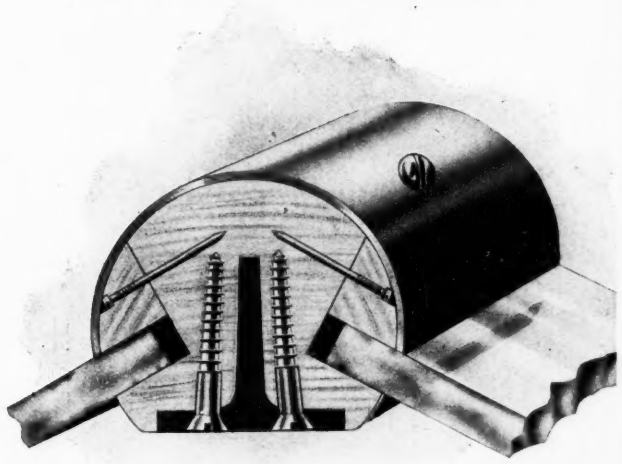

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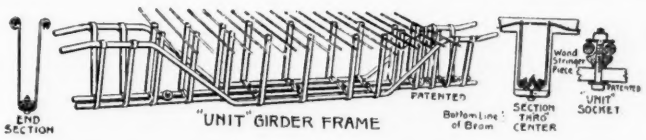

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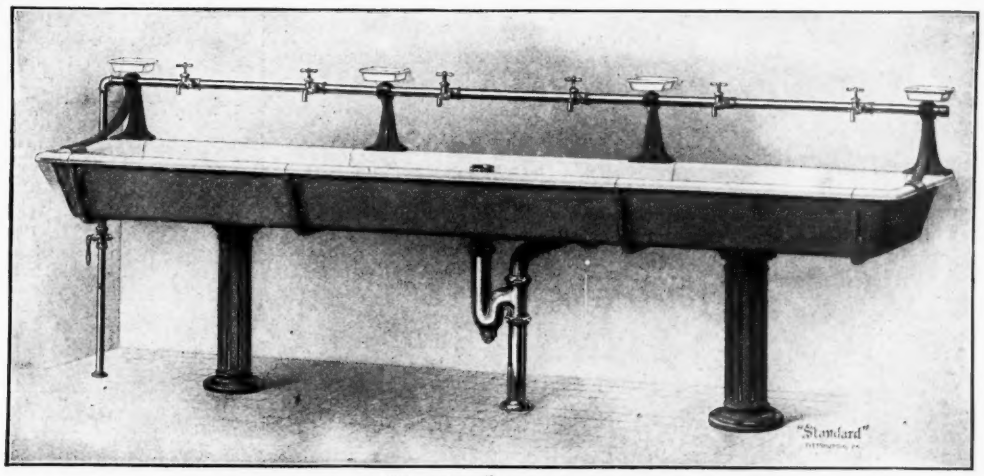

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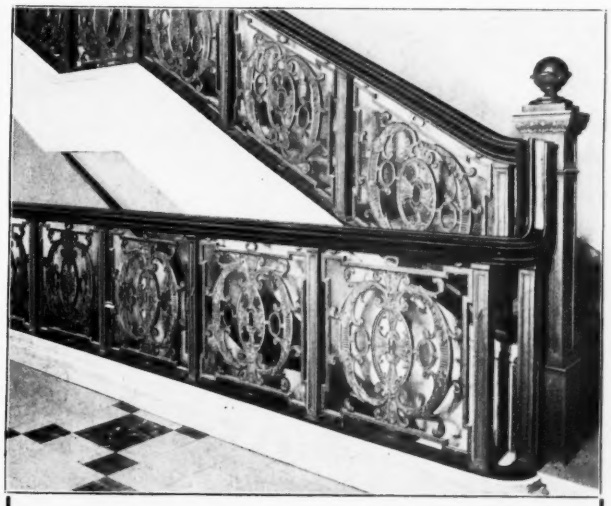

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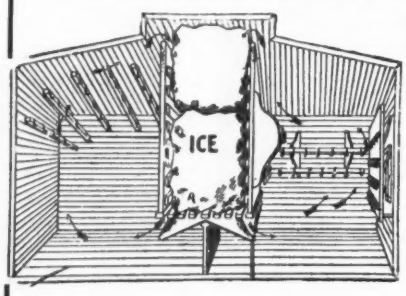

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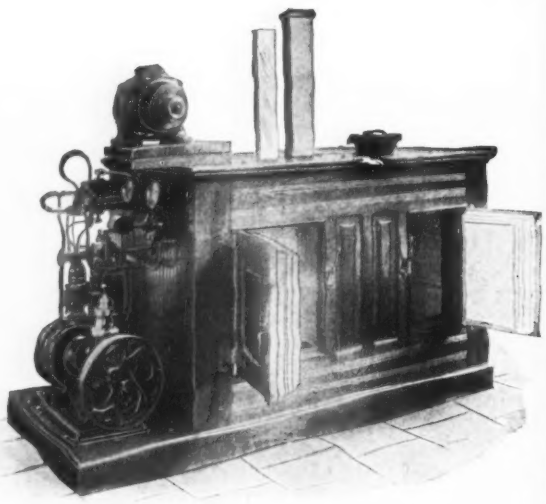

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THE INLAND ARCHITECT AND NEWS RECORD

VOL. XLVII. FEBRUARY, 1906 NO. 1

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THE ARCHITECTURAL LEAGUE OF AMERICA

(ORGANIZED 1899.)

The Architectural League of New York.
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The Twin City Architectural Club.
The National Sculpture Society.
The National Society of Mural Painters.

ERNEST JOHN RUSSELL, President, St. Louis.

NEXT CONVENTION AT WASHINGTON, D. C., 1907.

Proceedings of the Convention of the A. L. A.

Each convention of the association emphasizes the wisdom of the attitude of the Architectural League of America toward the important questions before the profession. The more generally that the objects of the association become known, the more generous recognition it is accorded by the older established societies and their individual members. The younger association is quite willing to leave the ethics and questions of professional practice to others, and to concentrate its endeavors upon two subjects—Civic Improvements, the great movement that the A. L. A. claims with considerable justness to have inaugurated; and the Education of the Architectural Draftsman. These were the subjects of two remarkable papers presented at the convention. That on Civic Improvements by the committee of which Frederick S. Lamb is chairman, was a complete résumé of this widespread movement. The paper on Education was in the form of the report of the committee of which Prof. Newton A. Wells is chairman. The intelligence displayed in securing the information contained in this report, and the care and thoroughness shown in its arrangement and tabulation, can not be too highly commended. The facts presented are sure to have much influence upon the courses of instruction in architecture of our universities and schools. The entertainment of the convention by the Architectural League of New York, the National Sculpture Society and the National Society of Mural Painters will be long remembered. The opportunity to visit and examine in detail, under such favorable conditions, many of the best examples in New York of architecture, sculpture and mural painting was greatly appreciated.

The Signing of Buildings.

Since the circulation by THE INLAND ARCHITECT of the leaflet entitled, "Honor to Whom Honor is Due," there has been awakened much interest in the signing of buildings by the architects who design them. An evidence of this interest was expressed by the passage of a resolution offered by the Cleveland Chapter at the last convention of the American Institute of Architects. This motion called for the appointment of a committee to investigate the desirability and best method of signing buildings and report to the next convention. Numerous replies to the leaflet have been received, representative of all sections of the United States. These show an interesting unanimity of opinion in favor of credit to architects for their designs in connection with the completed buildings. It is found to be the custom of some architects of unquestioned standing to place their signs upon buildings in course of construction, and even upon temporary storehouses about such buildings. This practice is regarded by many as undignified and there are instances where such course has resulted in the disciplining of offending members by local architectural associations. This phase of the subject is the one likely to be most fruitful of differences of opinion. Mention will be made in these columns of such further suggestions and opinions as are received by this journal.

ARCHITECTURAL LEAGUE OF NEW YORK EXHIBITION

BY WM. MARTIN AIKEN, ARCHITECT.

THE Architectural League of New York had its origin in the Architectural Sketch Club, which was formed in the fall of 1879 with a membership of less than a dozen draftsmen, all employed in the same office, all full of enthusiasm, all ambitious to excel some day in their chosen profession, and each one ready and willing to help his fellow.

To this end sculptors and decorative painters were subsequently invited to join them and assist not only in mutual improvement but in interesting the public and in cultivating a general appreciation of architecture, sculpture and painting, and proving the interdependent relations of each for the complete success of any one of these three arts, by exhibitions and lectures; and so the Architectural League was formed.

The Columbian Exposition of 1893 at Chicago was the first opportunity for the practical demonstration of this spirit and every one now knows with what loyalty, enthusiasm and self-sacrifice the architect, sculptor and painter worked, side by side, day and night to produce the "White City," which, although it has disappeared as completely as Carthage or Babylon, yet produced an impression that is now being felt from New York to San Francisco, from New Orleans to St. Paul.

Many previous exhibitions of the League have shown a greater number of exhibits, but it has seldom happened that the three arts have appeared more intimately connected, and with a better general average. The position of honor in the twenty-first exhibition has been given to a study of angels, in blue and gold, for the decoration in the Church of the Savior at Philadelphia, by E. H. Blashfield, whose work, while always showing breadth and dignity of conception, great refinement of detail and most enviable skill in drawing, in this instance strikes a strong note in color, and is worthily supplemented by other crayon studies and photographs of the work of this artist. On the opposite wall of the Vanderbilt gallery are large photographs of the four noble groups, modelled by D. C. French, for the front of the New York custom house.

In the center of each group is seated a female figure. Asia with drooping eyes sits erect, robed, jewelled and coifed; a poppy in one hand, a statuette of Buddha near the other, her feet on a foot-stool supported by skulls, a boy kneeling in the dust, two weary figures bending over on her left, and a great swirling tigress on her right.

Africa, semi-nude, rests in the desert, asleep, one arm on the Sphynx the other on a lion.

Europe, enthroned and crowned, has her right hand upon the prow of an armored ship, her left upon a huge volume; behind the throne appear the imperial eagles and other emblems of power.

America, alert, seems about to rise, a torch is in her right hand, sheaves of grain lie in her lap, under the overhanging ears of corn sits an eagle, on the other side a kneeling figure directs the winged wheel, and in the background is a plumed Indian.

The center of the west wall is occupied by "Progress, followed by Peace and Prosperity," a ceiling decoration of importance for the National Park Bank by Albert Herter; facing it on the east wall is Kenyon Cox's cartoon for "Agriculture," in the Iowa State capitol, which, even its unfinished condition, shows the hand of one accustomed to the handling of the big problems and to the distinction between decorative painting and mural decoration.

Below this cartoon are three groups, in relief, of Architecture, Painting and Sculpture, by H. A. McNeil, expressed with much of the feeling of the sculptors of the Italian renaissance; and beneath them a perspective drawing of the Grand Central Terminal Station, by Warren & Wetmore, who are here associated with Reed & Stem.

The water color rendering of this drawing calls attention to the varied and skilful methods by which many of the exhibits have been presented; similar in character are drawings for the office buildings, for the Senate (John M. Carrere), and for the House of Representatives (Thomas Hastings), at Washington; for the Title Guarantee & Trust Company, 176 Broadway, New York, by Reed & Stem; all of these are full of sunlight and have an atmosphere of their own that is very charming.

The birdseye perspectives of Henry Hornbostel are very attractive and the details are most carefully and skilfully indicated; quite as different but equally as interesting are the pencil sketches of Vernon Bailey Howe; the picturesque country house shown by Wilson Eyre, the cottage by Gay & Nash, others by Donn Barber, Budd & Emery, Kirby, Petit & Green, Louis R. Metcalfe, are examples of good pencil and brush work.

John Russell Pope shows an admirable black and white of a design for a commemorative monument on the Great Lakes, also photographs of two summer residences (one at Newport, R. I., the other at Roslyn, L. I.), which, with another by Carrere & Hastings (at West End, N. J.), certainly merit the palm for elegance.

Maxfield Parrish has sent one of his best and most characteristic designs, a title page in color, for "Italian Gardens"; and F. H. Bacon two of his excellent drawings. There are also several admirable birdseye perspective water colors of landscape architecture by Brinley & Holbrook, by Charles Leavitt Jr., by Snelling & Potter and by Lewis P. Hobart.

The design for the proposed Hendrick Hudson Memorial bridge over Harlem River in stone and iron, if executed as indicated will be a most welcome addition to the list of good bridges in this country, where the engineers (Boller & Hodge) and architects have coöperated.

There are many good college and school buildings, as shown by photographs and by drawings of Allen & Collins, Cope & Stewardson, Delano & Aldrich, Cass Gilbert, Raleigh C. Gildersleeve, McKim, Mead & White, Benjamin W. Morris Jr., Parish & Schroeder, George B. Post & Sons, Robertson & Potter and Walker & Morris, most of them frankly Gothic in feeling.

Several groups of drawings illustrate the work of architectural students at Cornell, Columbia, Massachusetts Institute of Technology, Pratt Institute; from the Ecole

des Beaux Arts (Paris), and from the Society of Beaux Arts Architects, New York.

Among the designs for churches and chapels those presented by Allen & Collins, Grosvenor Atterbury, Kirby, Petit & Green and by A. Durant Sneden, are the most interesting. There is the Saratoga Club House by Horace Greenley (rendered by Guerin), a fraternity house by Squires & Wyncoop, a New York club by H. J. Hardenberg, each one clever in its own manner and quite different each from the other.

Photographs of executed work often mean more to the layman than do conventional drawings, and those of the exterior and interior of the residence of Capt. Larz Anderson (cousin to Hon. Nicholas Longworth), designed by Little & Browne, should not be passed unnoticed; and a remarkable photograph from life of a group of female figures, entitled "A Tale of Isolde," by F. H. Hertzog (which has won European recognition), shows this to advantage; whereas those of the lunettes in the Minnesota State capitol by John La Farge are by no means so satisfactory, since here the decorative quality of the color is altogether absent. In the cartoons for stained glass which Maitland Armstrong has designed for the chapel at Columbia College, or those of Nicolo d'Ascenzo, or of Joseph Lauber, the leading and shading have such value that the imagination may supply much of what can not be expressed—except the sparkling brilliancy of the glass itself.

In the room to the right of the entrance are displayed the drawings of students of the Ecole des Beaux Arts and of the New York Society of Beaux Arts; and on the second floor are drawings submitted in competition by other students; but in each of the other five galleries the work of practicing architects is punctuated and framed in by caryatides, spandrels or models from the studios of Bitter or Barnhorn, Linder or Miss Longman, Borglum or Brewster, Martiny or Newman Even; while the stronger note of positive color is supplemented by Millet's studies of American Indians, Turner's studies of figures of the last century, Willis' naval engagements, Lydendecker's illustrations of the 23d Psalm, Metcalfe's reproduction of Michael Angelo's "Sybils," Miss Hormann's Pompeiian frescoes, Bensons' "Pomona," or Marsh's record of the construction of a skyscraper—"The Derrick Riggers."

Here and there are gargoyles and grotesques, leathers and lanterns, grilles and gates; between them photographs of such work as the Gorham and Tiffany buildings, by McKim, Mead & White; the Gothic office building by Kirby, Petit & Green; and water colors of the Holland churches of Joseph & Jan Stuyt (Amsterdam), or the work of this year's medallists, Ballin, Craig, Licht or Skodik.

The league has reason to feel encouraged to even greater efforts by the coöperation of exhibitors, by the attendance of the public, and by the generous support of the advertisers, who make possible such exhibitions.

ARCHITECTURAL EDUCATION*

THE committee on education respectfully submits the following report:

The committee decided to prosecute an investigation along the following lines:

What are the schools doing for architectural education?

What can be done to aid draughtsmen, who can not attend the schools, in gaining an architectural education?

The first step taken was to obtain the latest catalogue circulars of information from six of the largest schools of architecture, giving degrees, in the United States. From these a tabulated table was compiled (see below), showing the relative amount of attention devoted by each school to certain distinct groups of study.

The following circular letter was then sent out to one hundred prominent professional architects:

ARCHITECTURAL LEAGUE OF AMERICA.

January 1, 1906.

Dear Sir:—Below is a schedule showing the character and amount of preparatory and collegiate study required for graduation by six of the leading schools of architecture in the United States.

The amounts of study are represented by figures which stand for "points," a "point" being equivalent to one recitation or lecture per week through the collegiate year, or to three times that amount of time spent in the drawing room, or the laboratory.

While there is but a small difference in the total number of "points" which the several schools require for graduation, it will be seen that there are wide differences in the proportions of time allotted to different classes of subjects, thereby materially modifying the general character of graduation requirement presented by each school. For example: Columbia presents 18.5 "points" in the Theory and History of Art, while Illinois presents but 7 "points" in those subjects. This is a very material difference in the aesthetic character of the training offered by each.

Will you kindly look the schedule over and express in "points" placed in the column of Remarks, your opinion as to the adequate amount of study that should be devoted to each class of subjects in a curriculum that aims at the best training in Architectural Design?

Do not permit the total amount of "points" to exceed 90.

Will you also kindly express an opinion upon the "Atelier System" of instruction, as it is being introduced in several of our cities? Any further suggestion that you may offer will be welcomed.

Address: Newton A. Wells, Champaign, Ill.

NEWTON A. WELLS,
R. C. SPENCER,
J. W. CASE,
Committee on Education, A. L. A.

	Harvard	Columbia	Pennsylvania	Cornell	Mass. Institute of Technology	University of Illinois
Mathematics	6. 5	12.	11.	9.	12.	10.
Engineering	6.	6.	3.	3.	3.	6. 5
Graphics	4.	4. 5	3.	4.	5. 5	5.
Building Construction	5.	6.	6.	5.	6. 6	10. 5
Design	20.	21. 3	24. 3	32.	13. 6	15. 5
Freehand Drawing, Modeling, Rendering	9. 5	9.75	7. 5	11.	7. 2	5.
Art Theory and History	17.	18. 5	9.	7. 5	8.	7.
Science	4.	2.	4.	6.	9.	9.
Langauge	10.	7.	20.	11.	20.	12.
General History	2.	2.	2.	2.	4.	2.
Total	84.	89.05	89. 8	90. 5	88. 9	82. 5

*Report of the Committeee on Education, Architectural League of America, Newton A. Wells, chairman, presented at the A. L. A. Convention, February 1, 1906.

About thirty replies were received, twenty-five of which contained "point" markings, as requested by the committee.

Many of these letters, coming as they do from men of large and successful experience, are rich in suggestion, and, with your permission, I will quote from some of them:

COMMENTS UPON ATELIER SYSTEM.

"I am a great believer in the Atelier System, and have found the problems offered by the Beaux Arts Society of great benefit to my students."—Percy Ash, professor of Architecture, George Washington University.

"The Atelier System is good with men having a sufficient training and then needing only a light direction during a problem; that is to say, after four or five years of school, or office training."—Paul P. Cret, assistant professor of Design, University of Pennsylvania.

"Do not on the whole, favor the Atelier System in this country. American conditions of life and culture not favorable to it Danger of lack of strictness on the part of 'Patron' due to easy good nature and favoritism, in absence of intelligent public opinion."—C. R. McNeil, of Ross & McNeil, 39 E. Forty-second street, New York City.

Mr. McNeil is a graduate of Columbia, '94.

"Atelier System as done by the Beaux Arts Society is of greatest worth as value."—George Cary, Buffalo, N. Y.

"I think the Atelier System excellent where there is a large number of advanced students. But even then it takes some years to develop it up to a sufficient point. A good architectural education first, then the Atelier."—Geo. O. Totten Jr., Totten & Rogers, Washington, Philadelphia, Newark, N. J.

"It seems to me that some of our Atelier Systems, where the student studies at night and is employed making a living in the day, will not produce the results as where the student gives his daytime to study, as in Paris."—H. R. Ross, architect, 542 Fifth avenue, New York City.

"I am in thorough sympathy with the Atelier System. It has worked well in France and I do not see why it would not be a good system to introduce in this country more than it has been."—J. Lawrence Aspinwall, Renwick, Aspinwall & Tucker, 320 Fifth avenue, New York City.

". . . we heartily approve of the Atelier System of instruction, as it is being introduced into several of our cities, . . . "—Lord & Hewlett, 16 E. Twenty-third street, New York City.

"I believe that Columbia is especially fortunate in that it is possible for her to use the Atelier System. We have always hoped in the past that Cornell might use this system, and if she continues to grow I see no reason why it should not be introduced."—John V. Van Pelt, formerly professor of Architecture at Cornell, director of an Atelier connected with Columbia University.

"I deplore at every opportunity, both in conversation and in print, the modern tendency to gallicize our architecture, believing that, as we, our land and our civilization, are the product of Anglo Saxon civilization, so should our art be. In architecture this means comfort, lack of pretentiousness, sincerity, and the homely quality, all of which are precisely opposed to the bombast and general meretricious, white and gold plaster of the Pseudo-Classic French school."—B. G. Goodhue, Cram, Goodhue & Ferguson, New York and Boston.

Mr. Goodhue says further that he learned his profession as an apprentice in an office, and that he still considers that the best way of imparting instruction in architecture.

"I am distinctly in favor of the Atelier System of instruction inaugurated by the Beaux Arts Society, for the reason that it gives the men in offices a chance heretofore denied them, but I am not by any means an adherent to all of the aims and ideals of this society. Their earnestness and enthusiasm, their liberality and devotion are admirable; their central tenet that 'the plan's the thing' is sound as can be, but they are too Gallic for America. I do not like the mold in which they almost to a man cast their architectural ideas. I have had sufficient demonstration of the value of their competitions to draughtsmen. I am 'all for it.' Hoping that I have answered your questions satisfactorily, I remain, yours very truly, Bragdon."

"I believe in the Atelier System when the 'patron,' or instructor, is an Atelier-bred man with that happy faculty of inspiring the student with the spirit of the Paris Atelier, where it has reached its perfection. Such work gives the proper prominence to the theory of design—and design per se, rather than the mere accumulation of stock in trade—architectural forms and architectural styles for future reference."—John Laurence Mauran, Mauran, Russell & Garden, St. Louis.

"I am very much in favor of the Atelier System of instruction on account of being a Beaux Arts man myself."—Kenneth M. Murchison, 320 Fifth avenue, New York City.

"You ask my opinion upon the Atelier System of instruction being introduced in several of our cities. The young draughtsmen who attend these Atelier classes jump to the front at once, and we are eager, in fact we seek the men who are availing themselves of this class of instruction."—W. B. Mundie, Jenney, Mundie & Jensen, Chicago.

"From experience at the Beaux Arts in Paris, we would say that we know of no better system that the Atelier System."—Charles Collins, Allen & Collins, Boston and New York.

"The Atelier System, for the architectural draughtsman who is endeavoring to earn his living and increase his knowledge at one and the same time, is, we believe, the very best thing for draughtsmen to take up under such circumstances."—Adin B. Lacy, 1912 Walnut street, Philadelphia.

"In relation to the Atelier System of instruction, I have merely to say that while I consider it very valuable, I think that as at present constituted it presents a great difficulty, in that it will lead young men, and perhaps the public in general, to imagine that mere skill in draughtsmanship and in designing on paper (that is, preparing the tools of our guild), is sufficient to constitute a man a worthy architect, and this, I believe, to be a most vital error."—Henry Rutgers Marshall, Bancroft building, New York City.

"You further ask my opinion as to the Atelier System of instruction. I believe that, like all others, it is a good method when rightly directed; that is, that the men in charge are competent to teach, but it has, from

its very freedom from control, very great dangers; incompetent persons might very easily establish ateliers and more damage be done by them than could be overcome in many years by the honest work of the good ones. This is more liable to happen in the smaller places in the country than in the large centers, such as New York, Chicago, or San Francisco."—James Knox Taylor, supervising architect, Washington, D. C.

The committee finds a wide divergence of opinion in this matter of the "Atelier System" of teaching architectural design. There seems to be a strong minority adverse to it, not on account of its method, but rather on account of the fact that its matter, which is French, a transplanted slip from an already decaying culture. It should not be forgotten, however, that such transplanting into a new soil sometimes results in a wholly new and improved type.

The majority of opinion, however, seems to incline to the belief that the "Atelier System," as it is being introduced by the Beaux Arts Society in America, is a most excellent supplement to school training, and that it offers the best present substitute to draughtsmen who are debarred from the advantages of a school training.

COLLEGE TRAINING FOR THE ARCHITECT.

We quote the following from letters in reply to our inquiry as to what should be done by the schools for architectural education:

"The column representing Columbia comes closest to my own idea. I can not but think that training in design, and in the history and theory of art, are the things that architects and draughtsmen need most; and, in the Columbia schedule these seem to me the best apportioned."—Claude Bragdon, Rochester, N. Y.

"As I know the curriculum at Cornell I believe them (the studies) to be adequately covered there, and my only regret is that the number of points for design can not be doubled."—John V. Van Pelt, formerly professor of Architecture at Cornell.

A reference to the schedule will show that Cornell already gives thirty-two points to design, the highest number given by any school.

"You will notice that I group design, free hand drawing, modeling and rendering and art theory and history in such a way as to comprise almost half of the collegiate course. I do this based on my experience as employer for the last fifteen years, handling many of the graduates from the different schools. This comprises the assistance that an architect desires, and I have invariably found that the men well versed and standing high in this group rise rapidly and become very valuable, in comparison to those who are very advanced on the other subjects at the expense of this group of three; they seem to take great interest in the work and it fires their ambition to succeed by reason of the attention paid them and their rapid advance. We look today upon architectural engineering as a course in itself. Should I want an engineer I would then group mathematics, engineering, graphics, construction and sciences as 70 per cent of their training."—W. B. Mundie, of Jenny, Mundie & Jensen, Chicago.

"In reply to your communication of the 1st inst. I beg to inclose you your circular with my idea as to the points in the various courses of study. You will see by it that I place the matter of design as being far more important than anything else in the group, for I find that the building construction and engineering one learns at college does not cut such a very large figure in business practice."—Kenneth M. Murchison, New York City.

W. S. Eames, of Eames & Young, St. Louis, writes: "Drawing should be as easy as writing." He also adds, in a spirit of facetiousness, I take it, "Designers are born, not made." Yet in marking his schedule, fifteen points for design and an equal number for free-hand work, the thirty points comprising one-third of the entire school time, he shows conclusively, not only that he believes that even the born designer should receive an education, but he clearly indicates the direction in which he believes that education should be emphasized.

Wm. B. Ittner, of St. Louis, writes: "More drawing and design and less mathematics and engineering."

Mr. Bertram G. Goodhue, of Cram, Goodhue & Ferguson, writes: "You will notice that in this column I have marked designing the highest, drawing, etc., the next, and building construction and mathematics third. This for the reason that I do not believe that anyone is at once equally an artist and an engineer. Indeed, a mechanical mind can not be expected to become a great architect; for the practice of architecture, as my friend Mr. Charles Eliot Norton, once told me, not only a widely ranging and liberal education is required, but also something of the poetic temperament; indeed, perhaps as much as is necessary to the poet, only of the sort that expresses itself naturally in enduring stone rather than in words. It has, too, always been a cardinal principle with me that a good architect should be able to render his own drawings, perspectives and the like in artistic fashion, and therefore, that the modern method pursued in competitions of limiting the rendering of the various perspectives submitted to one dreary monotony of outline and cast shadows is wholly wrong. To art theory and history I have set ten points, but I question if this is enough, though it would be were a course added in literature and the humanities generally."

Percy Ash, in charge of the department of architecture at George Washington University, writes: "Personally I consider three units in engineering about the correct amount. I strongly believe that the function of the architectural college is to develop the taste and artistic faculties, and I consider the course most efficient, in the long run, where the maximum of drawing and design is given and the minimum of engineering is provided for."

"I think language as broadening and beneficial in travel. General history should be absorbed at school. Science, mathematics and engineering are of less value to the architect as they approach the higher branches, while building construction, if you will pardon my saying so, should be fundamental only in the college course." John Laurence Mauran, Mauran, Russell & Garden, St. Louis, Mo.

"After discussions with several successful architects who are college bred men, we felt that there was very little question of the necessity for devoting all possible time that could be squeezed from anything else, in order to put it into design. Therefore the high figure—over one-third of the total time—given to that subject alone; a further reason being that the student can never get a knowledge of design anywhere else, as well as during his time in college. The same reasons apply to mathe-

matics, building construction and art theory and history." —Adin B. Lacy, 1012 Walnut street, Philadelphia.

"We believe that architectural design should receive a greater proportional amount of the student's time and attention than is devoted to it perhaps in any of the architectural schools."—Lord & Hewlett, New York City.

The following is from the pen of Henry Rutgers Marshall, an architect, also an author widely known for his books and writings upon aesthetics; he writes: "In my own opinion the great emphasis should be laid upon design, free-hand work, modeling, and the history of art in general, and of architecture in particular, as a development."

The following is from James Knox Taylor, supervising architect at Washington, who writes: "The architect nowadays does not need an extensive mathematical and engineering education, although he must have a knowledge sufficient of these subjects to be able to pass on them superficially. It is more economical, as well as better, for an architect to employ an expert engineer than to waste his time trying to do that kind of work himself. On this theory, therefore, I have increased the proportion allotted to construction, design, free-hand drawing and modeling, and art theory and history, as being the subjects to which a modern architect should give his principal attention."

I have one more letter upon this part of our inquiry, that is so full of thoughtful suggestion, that it deserves to be given in full:

Dear Sir:—I enclose a schedule on which I have marked the points for the Chicago School of Architecture, and, alongside, my own personal preference. I am very much interested in the architectural educational question, and have had some chance to study it, as I am teaching Architectural Design and Theory of Architecture at the Chicago School of Architecture. I feel that Design and Construction are taught too much as separate, independent subjects, the result being that the student acquires an education to become a good draughtsman in the narrower sense of the word; and not the education to become an architect. He becomes efficient in making drawings on paper, but his broad thinking capacity and sound imagination are not developed. He is taught to accept too many things without going to the very bottom of them. The art of thinking broadly and correctly can be given the student only by constant mingling of the drawing-board work and the work done in watching actual buildings, in the modeling room, out of doors, etc. No one can be honest in his design, without being thoroughly acquainted with the different materials, their possibilities and limitations, and without having acquired the ability to see correctly. This latter faculty is not developed in the drawing-room, but out of doors.

The tendency at specialization is carried too far nowadays, and is an imminent danger to the making of *broad men*. The designer and construction man have been too much separated. The designer should be taught that he has to check himself by structural and practical considerations; and the one who says "I do not care about design" must be taught that no matter what he does he has to design; the simplest piece of construction should be designed in the best possible way.

The effect of teaching and practicing design and construction as two separate subjects has been that two factions have formed themselves, the one constituting the "Purists," the other the "Decorators"; the "Purists" condemning everything that is not absolutely truthful to the last dot, striving to show everything in its naked simplicity, too naked very often; and the "Decorators" not caring about the structural part as long as they attain a certain decorative effect, whether this effect fits the case, or is appropriate to the climate, etc., or not.

I look forward with great interest to the report of the educational committee. Believe me, very truly yours,

H. V. VON HOLST.

A careful analysis of the foregoing opinions reveals an almost absolute unanimity regarding the emphasis that should be laid upon the aesthetic side of architectural education.

With regard to building construction there seems to be some difference of opinion, arising no doubt from the fact of design and construction being treated as separate subjects, which they are not, as Mr. von Holst has very astutely pointed out; and in fact, all of the schools do not treat these as separate subjects, but in conjunction as Mr. von Holst suggests.

With regard to science, engineering and the higher mathematics there is also a unanimous voice for their relegation to a subordinate place.

It may not be uninteresting to compare an average of the schools, group for group, with an average of the twenty-five tabulated professional opinions returned in response to the circular letter sent out by the committee.

	Harvard	Columbia	Pennsylvania	Cornell	Mass. Institute of Technology.	University of Illinois	School Average.	Professional Average
Mathematics	6 5	12.	11.	9.	12.	10.	10.08	8.88
Engineering	6.	6.	3.	3.	3.	6. 5	4 5+	5.16
Graphics	4.	4. 5	3.	4.	5. 5	5.	4.33+	4.12
Building Construction	5.	6.	6.	5.	6. 6	10. 5	6.51+	8.12
Design	20.	21. 3	24. 3	32.	13. 6	15. 5	21. 1+	25.0 +
Freehand Drawing, Modeling, Rendering	9. 5	9.75	7. 5	11.	7. 2	5.	8.32+	8.91
Art Theory and History	17.	18. 5	9.	7. 5	8.	7.	11.16+	10.82
Science	4.	2.	4	6.	9.	9.	5.66+	4.76
Language	10.	7.	20.	11.	20.	12.	13 33+	5.28
General History	2.	2.	2.	2.	4.	2.	2.33+	2.26
TOTAL	84.	89.05	89. 8	90. 5	88 9	82.5		

A further analysis of the schedule shows that, at Harvard, a little over one-half of the total time required for graduation is devoted to the aesthetic side of educational training; at Columbia about three-fifths; at Pennsylvania a little less than one-half; at Cornell a little more than two-thirds; at Massachusetts Institute of Technology, a little less than one-third; at Illinois, a little less than one-third.

The same analysis made upon the reports from the profession, gives a little over one-half of the time to aesthetic training, or about the same as that given at Harvard.

This indicates that, while Columbia and Cornell are somewhat in advance and Pennsylvania a little behind, the Institute of Technology and the University of Illinois are very much behind the present average professional opinion in this matter of aesthetic training.

Respectfully submitted by the Committee on Education. Newton A. Wells, Chairman; Robert C. Spencer, John W. Case.

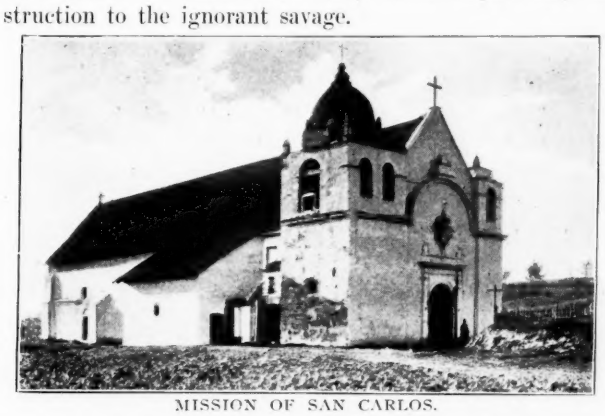
THE architecture of apartment hotels has already undergone a change as a result of the experiences of the proprietors of these places. Heretofore many of these hotels were put up with few single rooms. One of the largest in New York has only fourteen single rooms in its sixteen floors. They are always in demand, whereas many of the suites are vacant for a long time. "We've cut up our suites into single rooms as far as practicable," said one proprietor. "In the future there will be more single rooms than suites in all hotels. It has been found that the moderate priced room with a bath can always be rented. That is by no means true of the suite costing from three to five times as much."

THE OLD CALIFORNIA MISSIONS AND THEIR INFLUENCE ON MODERN DESIGN

BY W. L. B. JENNEY, ARCHITECT.

THE story of the old missions of California dates from the establishment of the first mission at San Diego in 1769. These old missions were military posts as well as religious centers. They were directed and assisted by the old Jesuit Missions of Mexico that presented church property as well as such agricultural tools, implements, seeds and animals as they were able.

At San Diego the military and navy assembled on the site selected for a presidio, where a temporary altar was erected and bells, hung between the trees, were rung. A crowd of natives collected to witness the ceremonies. These natives were of a very low order both physically and intellectually, nearly naked and crudely armed. They spoke a very rough, barbaric language that the fathers were forced to learn before they could impart any instruction to the ignorant savage.



MISSION OF SAN CARLOS.

The order from the king to establish the San Diego Mission included a mission at Monterey. The military detail intended for Monterey halted at San Diego only for a short rest and then pushed on. They failed to find the locality and soon returned to Mexico. A year later a new expedition was more successful and established the mission of San Carlos at Monterey. They were soon joined by a vessel, the San Antonio, which had been sent from Mexico. A chapel, work shop and dwellings were clustered along the beach, at first of a temporary character. The locality was favorable, the live stock multiplied rapidly, game was abundant. By gifts of gay calicoes and trinkets the natives were attracted and soon became attached to the fathers, who taught them not only religion but trades and agriculture, as they did at all the Missions, so that large numbers soon became very useful to themselves and to the Mission.

MISSION OF SAN ANTONIO DE PADUA.

A year later the San Antonio again arrived from Mexico bringing supplies and a relay of ten priests. Now the fathers were able to establish new missions. The San Antonio July 14, and San Gabriel September 8, 1771; San Luis Obispo, September 1, 1772.

The missions suffered severely from occasional raids

MISSION OF SAN GABRIEL.

and other criminal violence of the natives, causing the death of several fathers and the loss of property, particularly horses, by theft. When the thieves were followed closely they abandoned the horses, which ran wild, and these multiplied rapidly, resulting in herds of considerable size roaming over the country.

The Bay of San Francisco to the north had been discovered and the Mission of San Francisco founded, and shortly after the Mission of San Juan Capistrano

San Juan was evidently the finest mission up to this time, although built almost entirely by Indian labor. It was seriously injured by the earthquake of 1812. Early in the year 1779 the Mission of Santa Clara was estab-

MISSION OF SAN LUIS REY.

lished upon the fertile plain of San Bernardino. The fathers had considerable trouble with the Indians stealing cattle and horses, until some of the thieves were caught and executed, and from that time they stole no more cattle In 1812 and 1818 earthquakes almost destroyed the buildings of the missions generally, but worse than all other elements of destruction is what is called secularization, which seems to have been a general taking possession of the missions by the Government, from some very short-sighted, mistaken policy, said to be political. The cattle and lands and even the buildings were sold and the poor Indians were deprived of what they had acquired by industry and long possession. The same dismal tale is told everywhere.

(To be continued.)

THE PLANNING OF HOSPITALS

BY T. M. CLARK, ARCHITECT

PART V

THE slop sink, which, in hospitals, is generally of special construction for washing bed-pans, should be in a compartment by itself, well lighted, and provided with shelves or racks for spare pans. It must have both hot and cold water supply, and the valves for controlling the supply are usually arranged in the form of pedals, so that the nurse can have both hands free for her work.

The closets and slop sink and the urinals, if there are any, should not open directly into the ward. If it is no longer necessary to disconnect them by an open passageway, a lobby, with at least two windows on different, and, if possible, opposite sides, should intervene, so that the diffusion of occasional odors into the ward may be intercepted. Bathrooms and lavatories hardly need this atmospheric cut-off, as modern traps do not retain corrupting matter, or allow sewer gas to pass. They should, however, be well lighted, and so arranged that they can be kept perfectly clean. The bath should be of solid porcelain or enameled iron, and must be placed at or near the middle of the room, so that two nurses can assist, or even carry, a helpless patient to it. The lavatories, which are often placed in the same room with the bath, should also be of solid porcelain or enameled iron. In theory, the solid porcelain lavatories are, perhaps, better; but in practice the back of these is either in a separate piece from the basin and slab, and presents a joint which soon becomes filled with soap and dirt, or is so low that the soap and dirt splash over the top. In the enameled iron one-piece lavatories a higher back can be had, and the whole affair is less subject to warping and defects. A little space should be allowed between the lavatories, so that the edges can be wiped clean; and it is hardly necessary to say that all pipes and traps should be exposed, so that they may be at all times inspected and cleaned.

The nurse's duty-room, linen room and medicine closet, the patient's wardrobe, and the various toilets, constitute all the essential adjuncts of the ward, but it is common to add to these one or two private rooms, for patients who wish to be alone, or whom it is desirable to isolate. Often a patient's dining room is also attached to the ward, and a patient's day room is occasionally added.

All these details are properly left to the discretion of the medical officers of the hospital, who know, better than anyone else can, what disposition suits the needs of their patients best.

The connections between the ward and the other portions of the hospital are last to be considered, and here the architect will have an opportunity to exercise his skill in making them convenient, yet not too close. In most modern hospitals the various buildings, or "pavilions," as the doctors call them, are connected by a corridor. If the corridors are too long, the nurses and physicians are exposed to unnecessary fatigue, and, perhaps, to dangerous chills, in their continual passage through them; while, if they are too short, or imperfectly ventilated, air may pass from one ward to another, to the injury of the patients. In general, however, it may be observed that a short corridor, with cross ventilation from opposite windows, is far more efficient for atmospheric disconnection than a long corridor with windows on one side only. In order to allow the ward proper to have windows on opposite sides, the corridor usually connects with the ward building at one end of the latter, and the end which contains the nurse's rooms and lavatories is naturally chosen, so that the nurses, in coming from the other buildings, will not have to pass through the whole length of the ward to reach their work room. It is quite common to carry the corridor through the service portion of the ward, so that some of the rooms belonging to the ward are separated by it from the others; but the present tendency is to make the corridor merely tangent to the wards, so that all the services of the latter are grouped together, without the possibility of interruption by the traffic in the corridor.

Where the ward buildings are of two or more stories, the staircases should be in the corridors, instead of in the wards, so that air may not be communicated between the wards by their means. In large hospitals it is usual to carry food from the kitchen building to the wards by wagons, running on tracks laid in a tunnel or subway beneath the corridors. In this case a lift is generally provided, either in the ward dining room, or a serving room attached; and a similar lift often conveys soiled linen and clothes from the ward to the subway, to be carried to the laundry. These lifts, unless they are arranged to run in the open air, outside the building, may serve as shafts for the exchange of air between the different stories of the ward building, and they should be well ventilated. In some cases, instead of a lift for transporting baskets of dirty linen, a "clothes-chute" only is provided, down which soiled linen is simply thrown to the basement. This is a very objectionable arrangement, as the sides of the chute soon become coated with foulness from the clothes, and it is impracticable to clean them.

As the wards are devoted particularly to the sick, it is in them that the greatest precautions must be taken to insure their cleanliness and proper aeration. In addition to such disposition as will secure the most light and air and sunshine, not only in the room in which the patients' beds are placed, but in the auxiliary portions of the ward, dirt must find no lodgment in or upon walls, floors or fittings. Ordinary plastering is so porous that air penetrates it readily, and the germs and organic dust floating in the air are deposited in the pores of the plaster, where they may accumulate to a dangerous extent. The hard plasters are less porous, but it is safest to paint all plastered walls in hospitals with at least three coats of oil paint, over a coat of good varnish size; or, better still, with six coats of paint without size. Glue size, which is subject to decomposition, and is apt to become sticky in a damp atmosphere, should never be used in hospital work. Zinc white is preferable to white lead as a pigment, as it is not poisonous, and does not turn yellow; but as, when mixed in proper proportion with oil, it is thicker than lead paint, and requires more labor for laying it smoothly, painters usually prefer white lead.

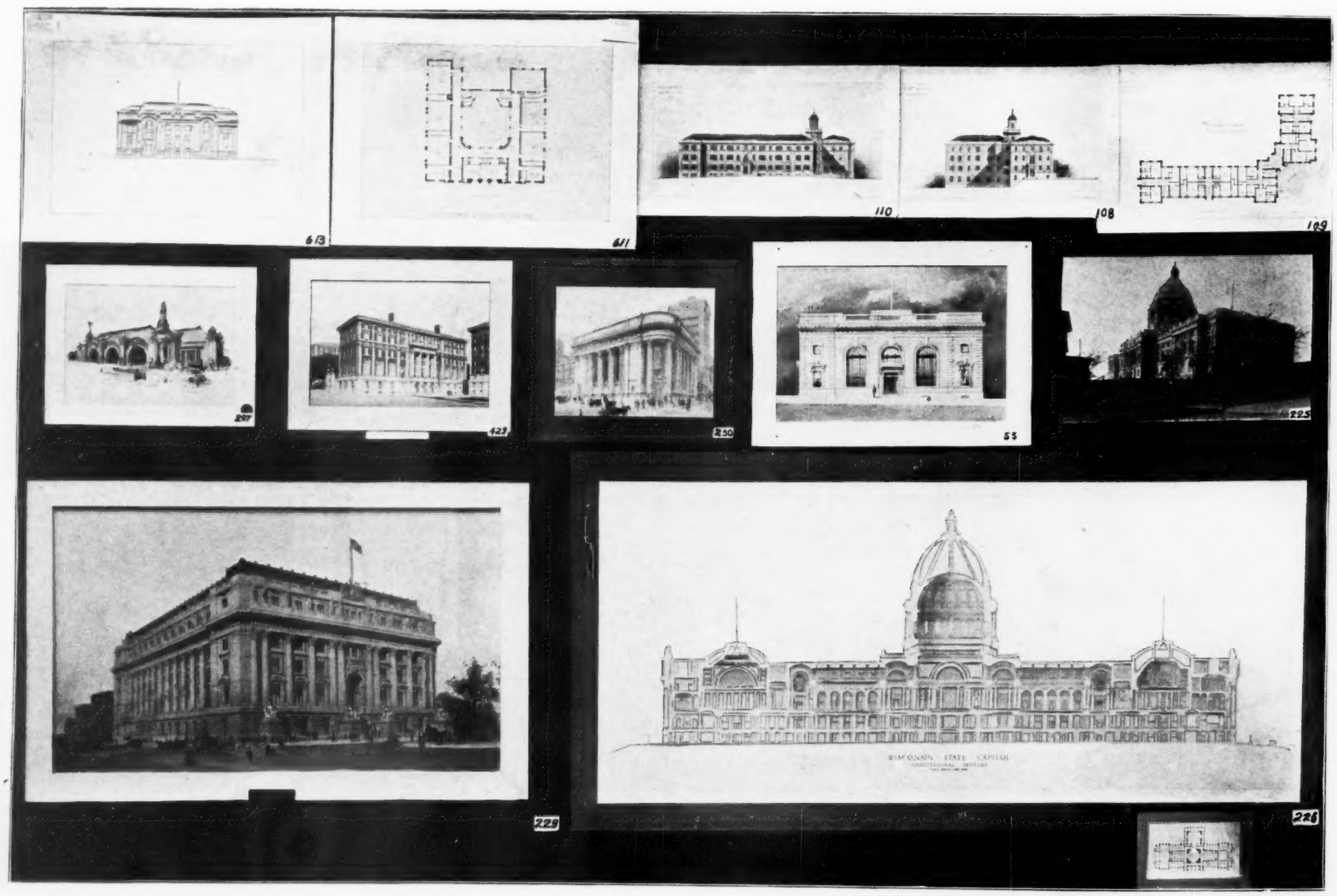
(To be continued.)

430. GORHAM BUILDING, MC KIM, MEAD & WHITE, ARCHITECTS.

8. MEMORIAL, VASSAR COLLEGE, ALLEN & COLLINS, ARCHITECTS.

553. ST. PATRICK'S CATHEDRAL, NEW YORK, D. E. ROBB, ARCHITECT.

560. RESIDENCE FOR A. ROGERS, ROBERTSON & POTTER, ARCHITECTS.



613. COMPETITION DESIGN FOR SCHOOL, R. S. STEPHENSON, ARCHITECT.

110. COMPETITION DESIGN FOR DORMITORY, CADY & SEE, ARCHITECTS.

207. TRANSPORTATION BUILDING, ST. LOUIS FAIR, OSCAR ENDERS, EXHIBITOR.

429. HAMILTON HALL, COLUMBIA UNIVERSITY, MC KIM, MEAD & WHITE, ARCHS.

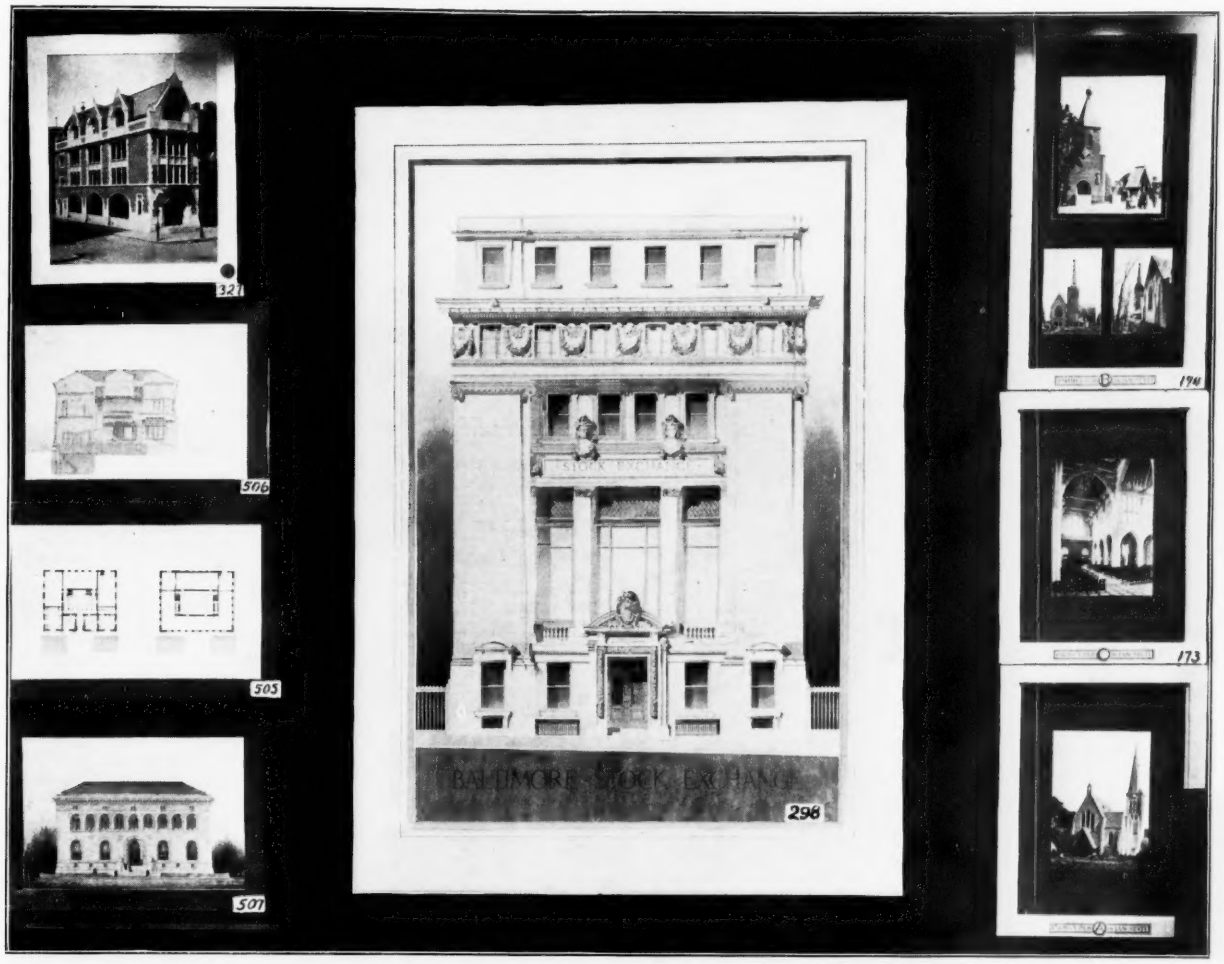
230. SUFFOLK SAVINGS BANK, CASS GILBERT, ARCHITECT.

55. NATIONAL BANK, BALDWIN & PENNINGTON, ARCHITECTS.

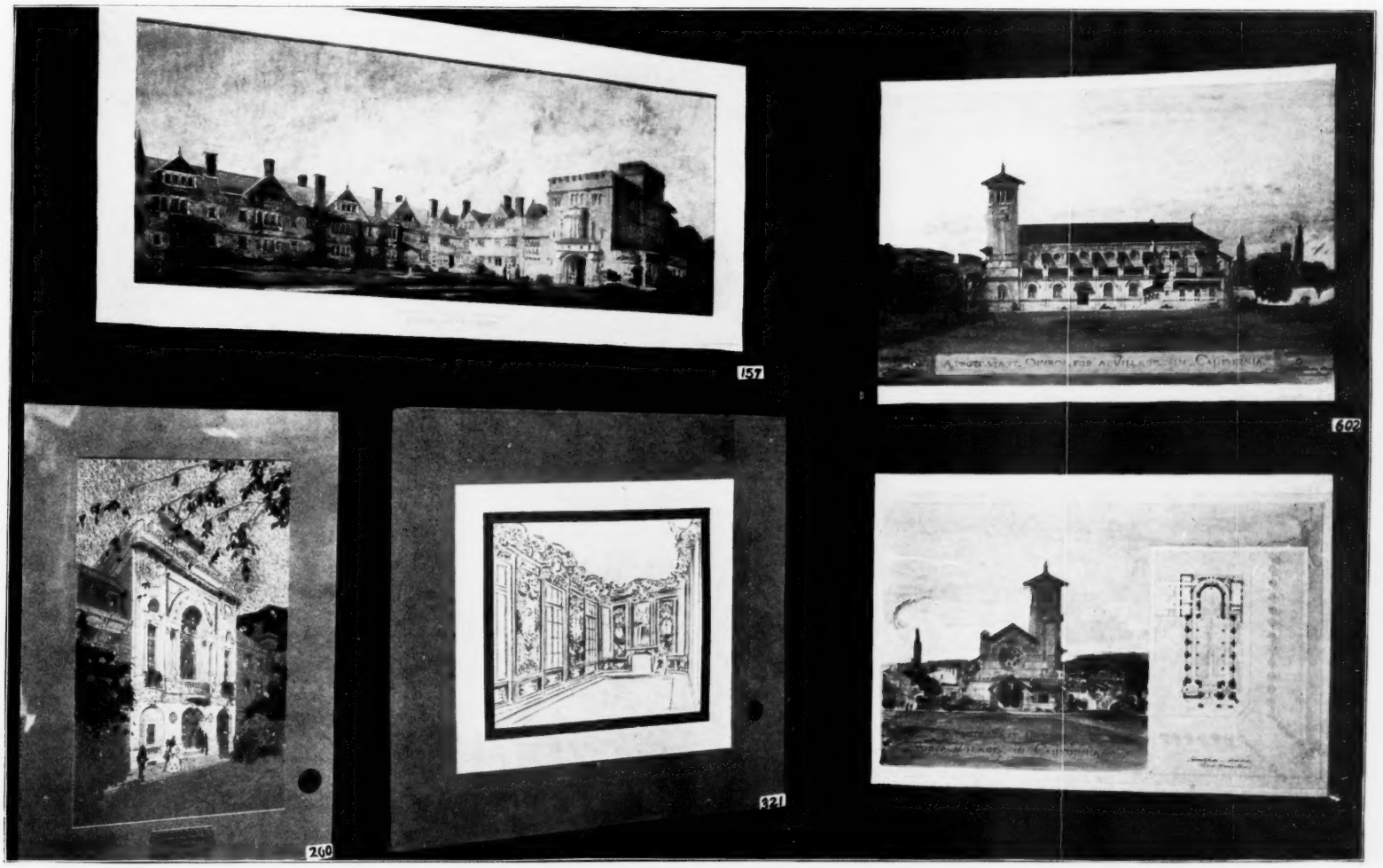
225. MINNESOTA CAPITOL, CASS GILBERT, ARCHITECT.

229. NEW YORK CUSTOM HOUSE, CASS GILBERT, ARCHITECT.

226. SECTION AND PLAN, WISCONSIN CAPITOL, CASS GILBERT, ARCHITECT.



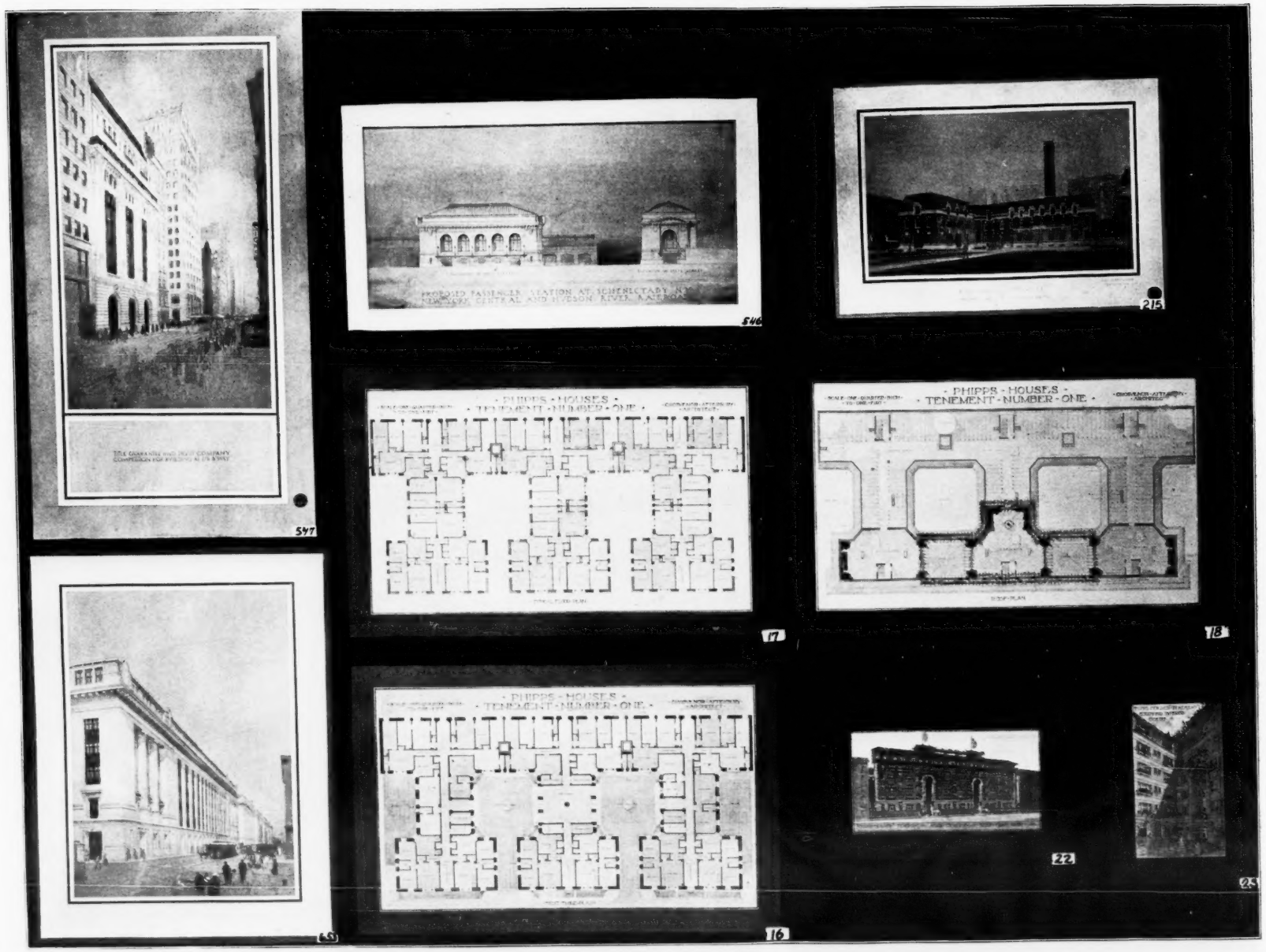
327. BUSH OFFICE BUILDING, KIRBY, PETIT & GREEN, ARCHITECTS.
506. MARYLAND INSTITUTE, PELL & CORBETT, ARCHITECTS.
173 AND 174. CHURCHES, HOLLAND, MESS CUYPERS, ARCHITECTS.
298. BALTIMORE STOCK EXCHANGE, HOWELLS & STOKES, ARCHITECTS.



157. DORMITORY, UNIVERSITY, ST. LOUIS, COPE & STEWARDSON, ARCHITECTS.
260. SARATOGA CLUB, H. GREENLEY, ARCHITECT.
321. SKETCH FOR SALON, HUNT & HUNT, ARCHITECTS.
602. CHURCH, D. A. SNEDEN, ARCHITECT.

ARCHITECTURE, SCULPTURE AND PAINTING, BY H. A. MACNEIL.

654. GRAND CENTRAL TERMINAL STATION, NEW YORK. 653. POWER PLANT FOR N. Y. C. & H. R. R. R. REED & STEM AND WARREN & WETMORE, ARCHITECTS.



547. COMPETITIVE DESIGN, REED & STEM, ARCHITECTS.

655. FOR N. Y. CENTRAL R. R., NEW YORK. REED & STEM AND WARREN & WETMORE, ARCHITECTS.

546. STATION AT SCHENECTADY FOR N. Y. C. & H. R. R. R. REED & STEM, ARCHITECTS.

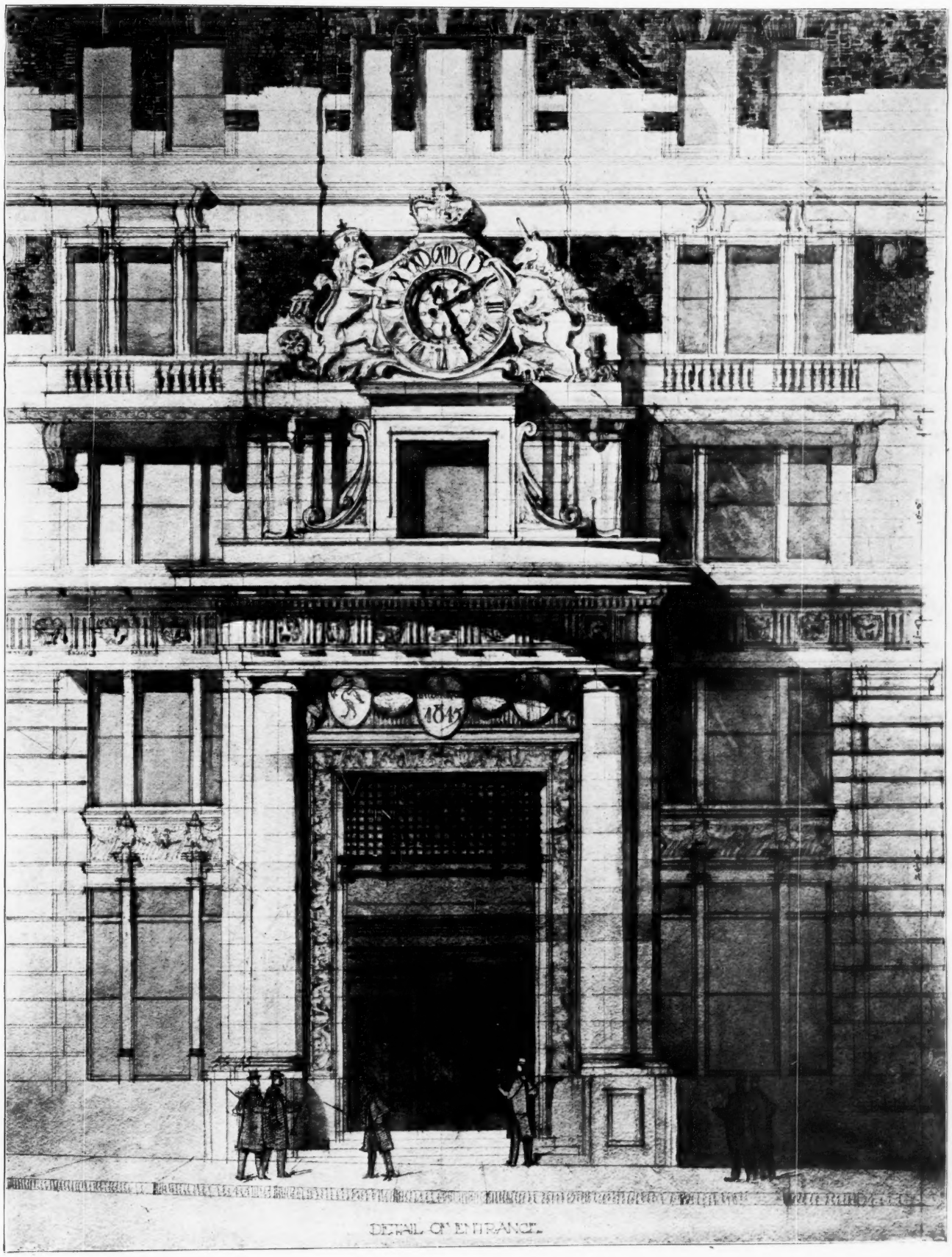
22 AND 23. PHIPPS HOUSES, GROSVENOR ATTERBURY, ARCHITECT.

215. STATION AND POWER HOUSE, HOSPITAL, J. H. FREEDLANDER, ARCHITECT.

FROM THE TWENTY-FIRST ANNUAL EXHIBITION OF THE ARCHITECTURAL LEAGUE OF NEW YORK.

THE ROYAL INSURANCE BUI

HOWELLS & STOKES, A



DETAIL OF ENTRANCE.

URANCE BUILDING, NEW YORK.

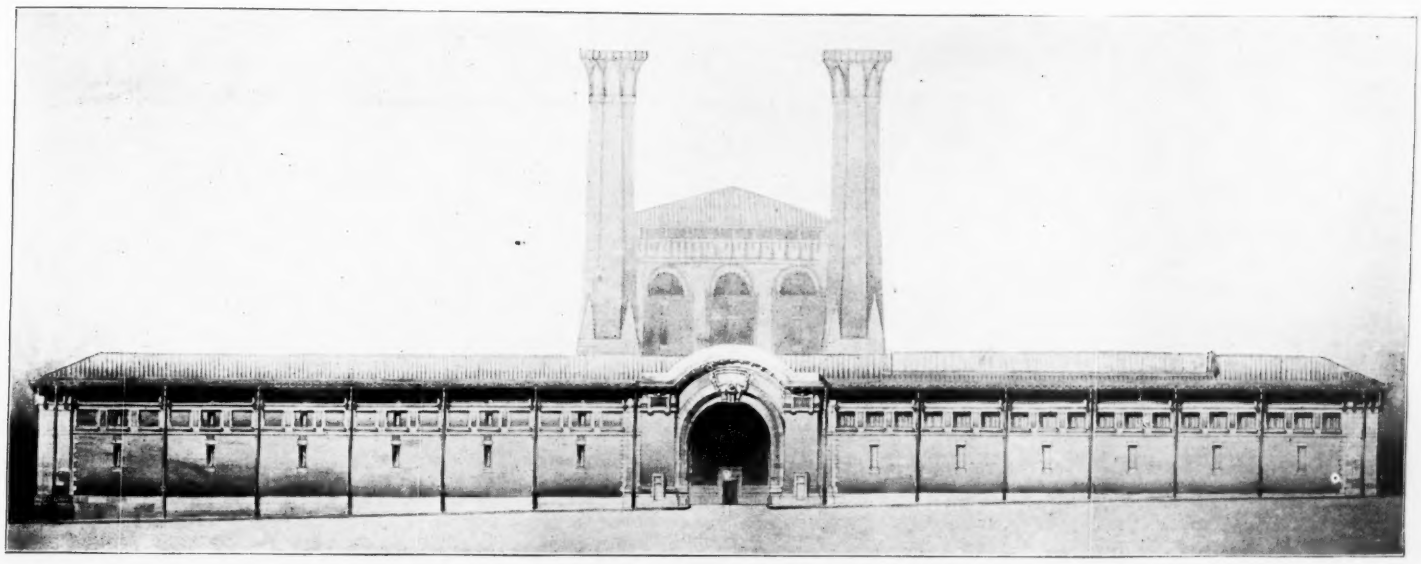
LS & STOKES, ARCHITECTS.

POSTOFFICE BUILDING, LEXINGTON AVENUE AND FORTY-THIRD STREET.

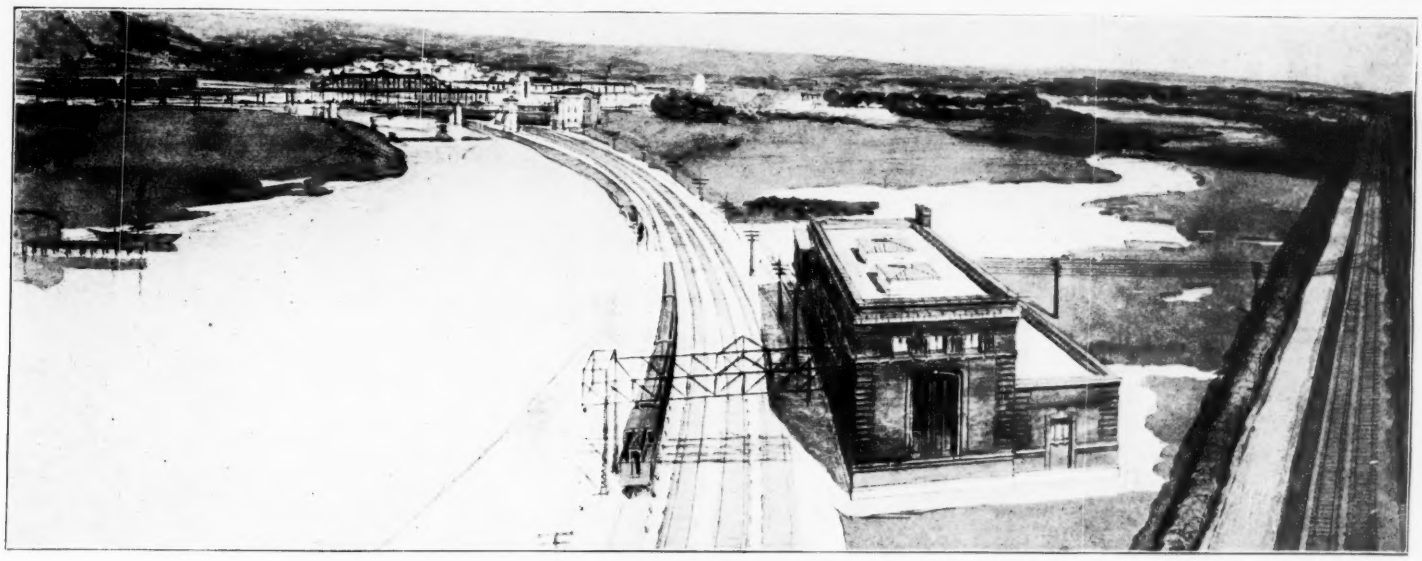
FORTY-FIFTH STREET END. GRAND CENTRAL TERMINAL STATION, NEW YORK.

IMPROVEMENTS FOR THE NEW YORK C

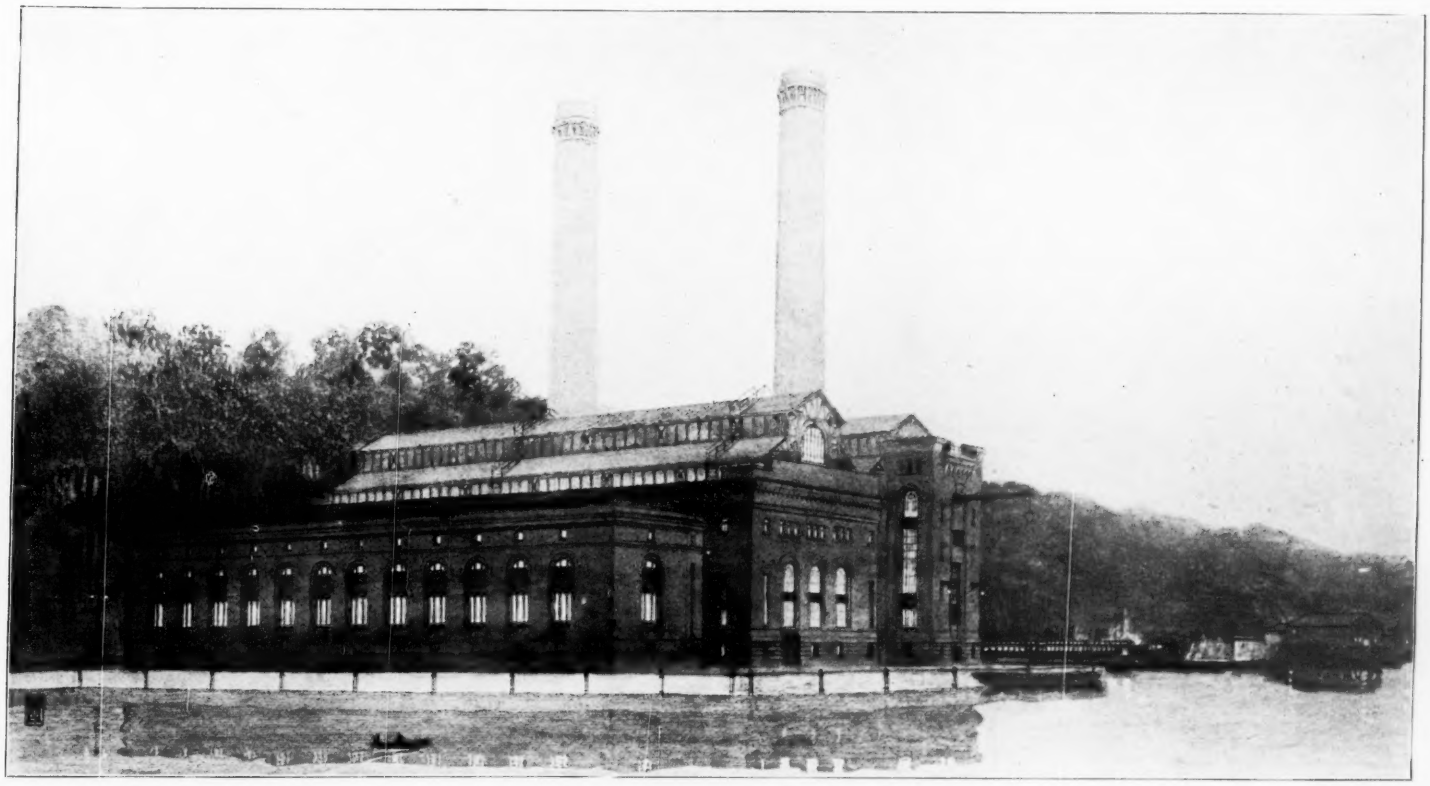
REED & STEM AND WARREN



SUBURBAN STATION NO. 1, FIFTIETH STREET, NEW YORK.



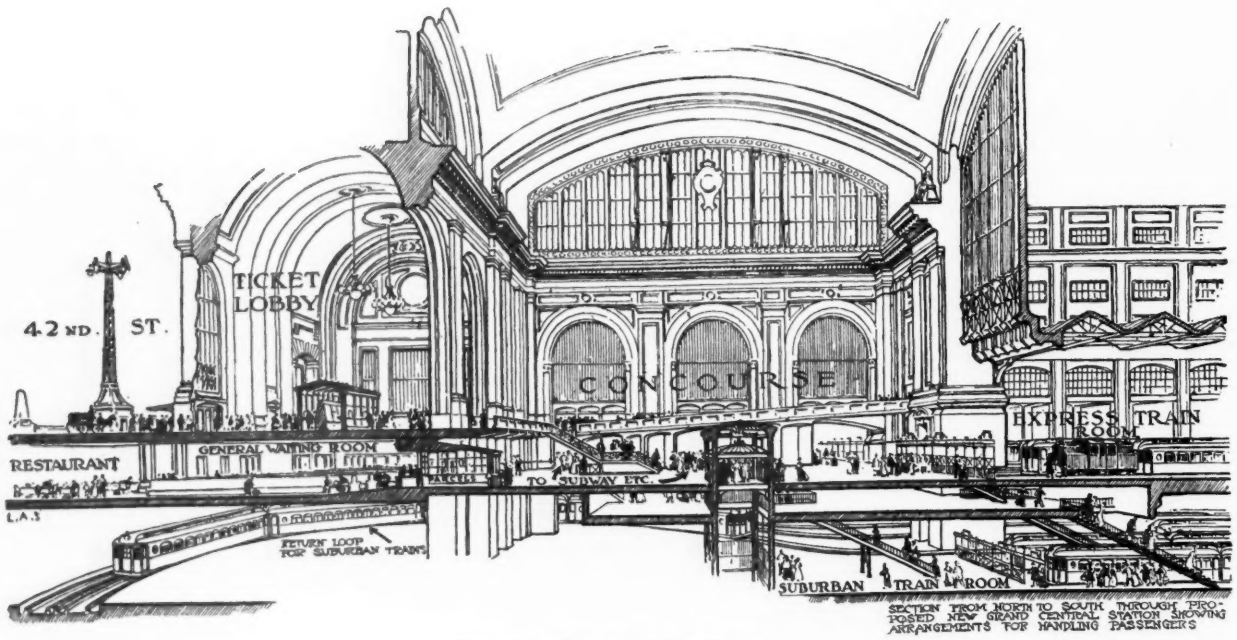
TYPICAL SUBURBAN STATION.



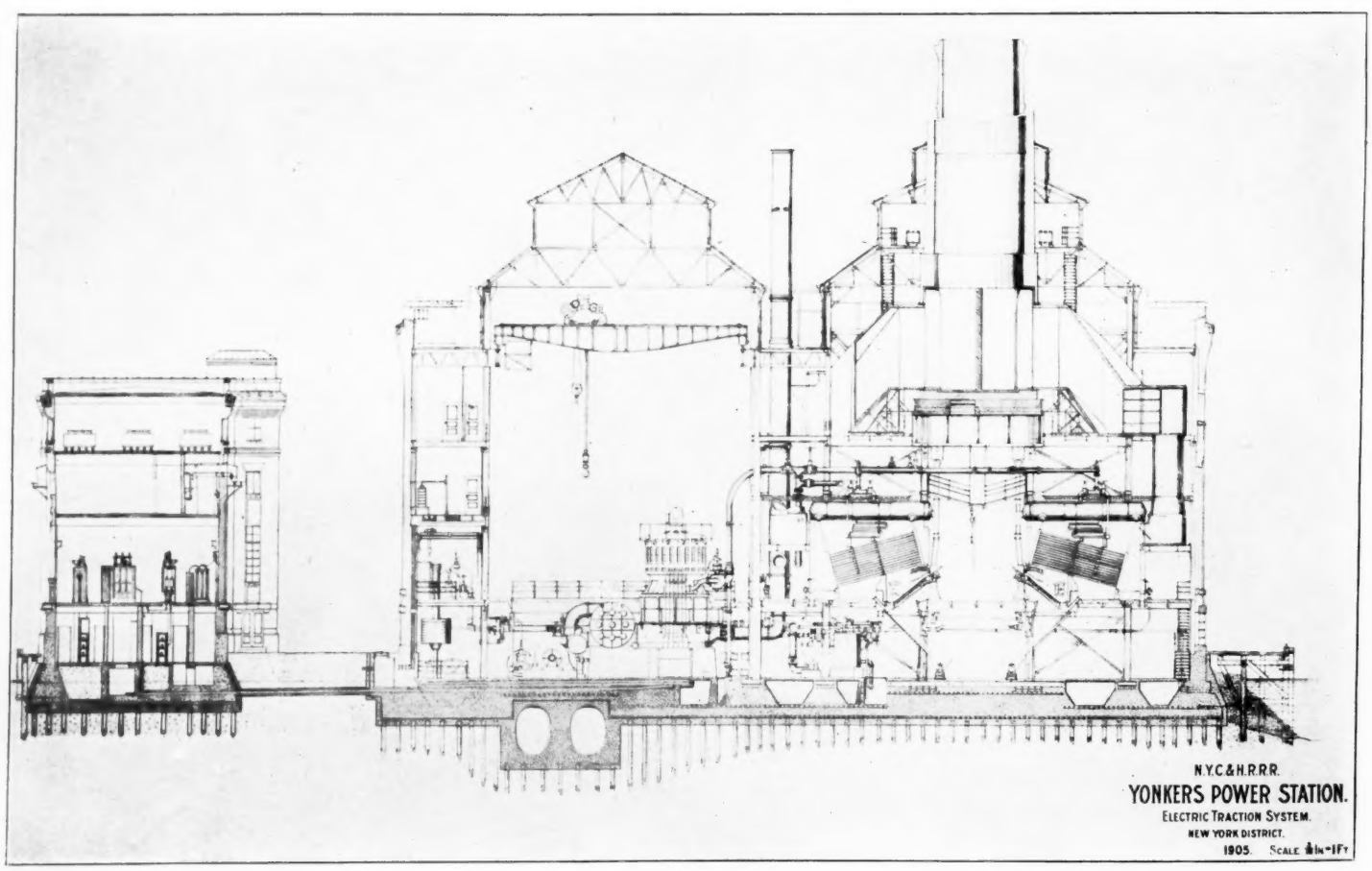
YONKERS POWER STATION.

NEW YORK CENTRAL AND HUDSON RIVER RAILROAD.

AND WARREN & WETMORE, ARCHITECTS.

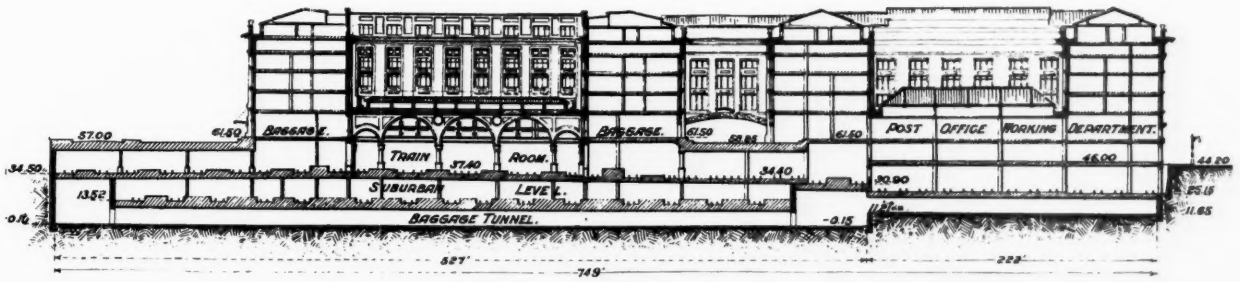


SECTION, GRAND CENTRAL TERMINAL.

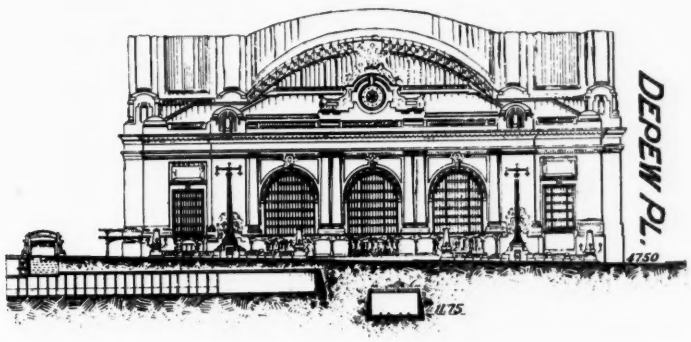


IMPROVEMENTS FOR THE NEW YORK CENTRAL

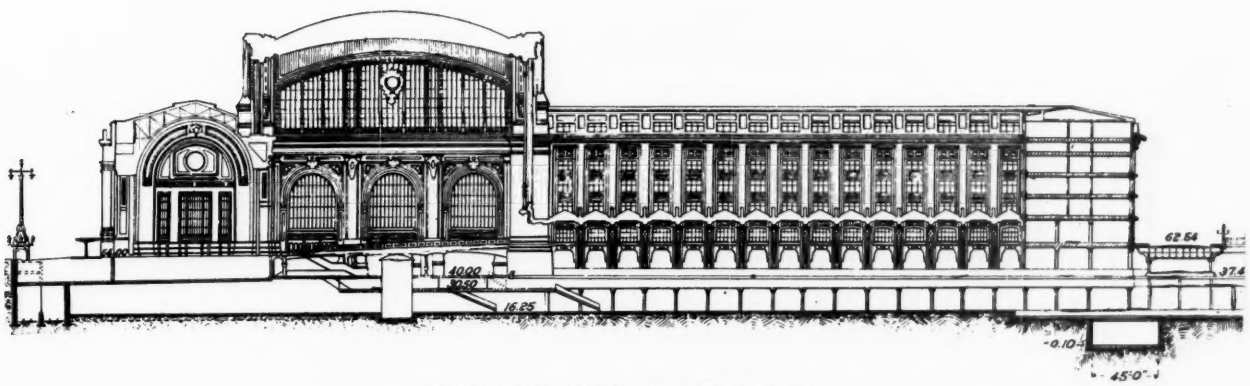
REED & STEM AND WARREN & WETM



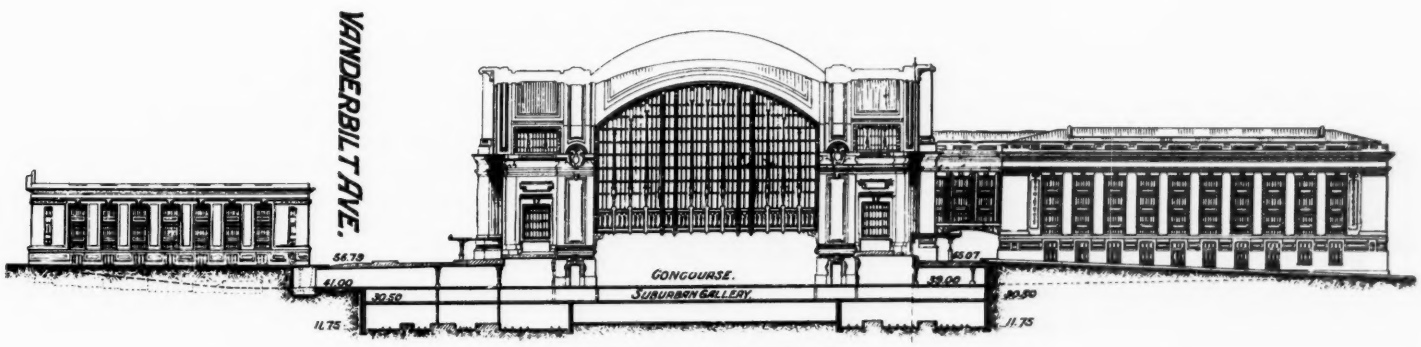
SECTION THROUGH TRAIN ROOM.



FORTY-SECOND STREET ELEVATION.



LONGITUDINAL SECTION ON PARK AVENUE.

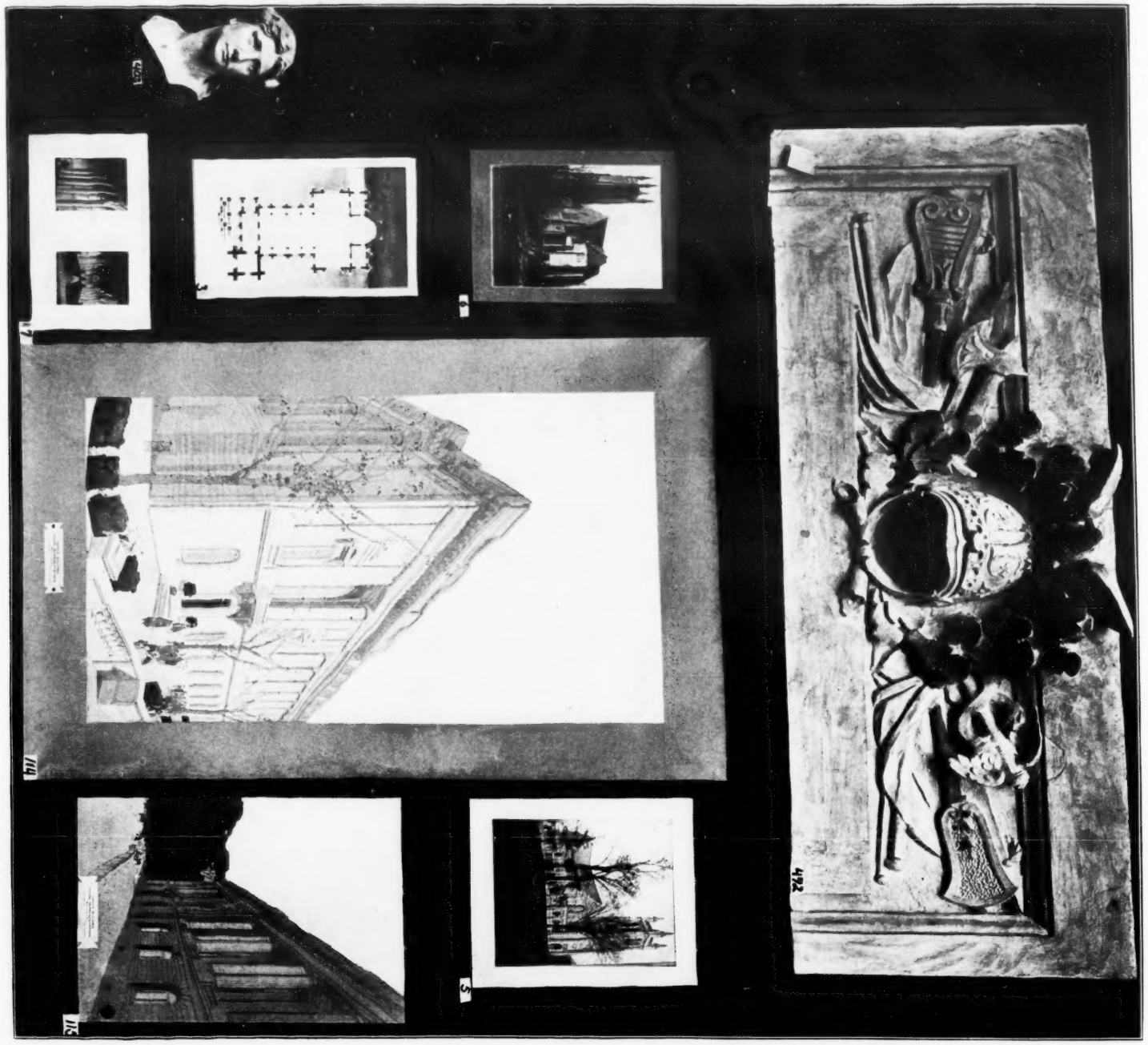


SECTION THROUGH CONCOURSE.

GRAND CENTRAL TERMINAL, NEW YORK.

RK CENTRAL AND HUDSON RIVER RAILROAD.

WARREN & WETMORE, ARCHITECTS.



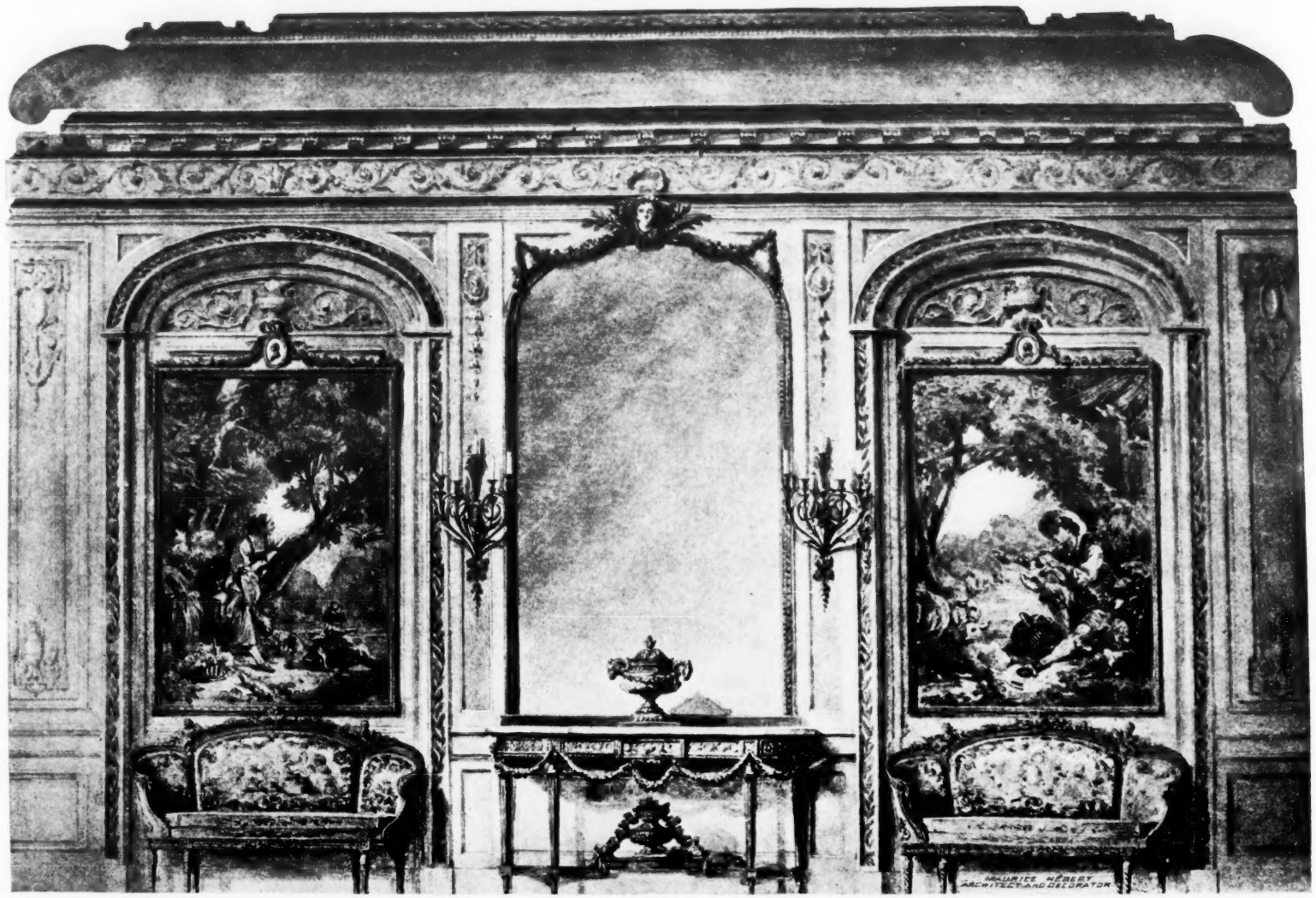
472. OVER-PANEL FOR HOUSE OF REPRESENTATIVES.

403. HEAD, H. A. MACNEIL, SCULPTOR. 114 AND 115. OFFICE BUILDING FOR HOUSE OF REPRESENTATIVES, CARRERE & HASTINGS, ARCHITECTS.

5. MEMORIAL CHAPEL, ALLEN & COLLINS, ARCHITECTS.

CREAM OF WHEAT BUILDING, MINNEAPOLIS, MINN.

HARRY W. JONES, ARCHITECT.



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PARLOR, RESIDENCE OF C. M. SCHWAB, NEW YORK.

Maurice Herbert, Architect and Decorator.

MAURICE HERBERT, ARCHITECT AND DECORATOR.

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DINING ROOM, RESIDENCE OF C. M. SCHWAB, NEW YORK.

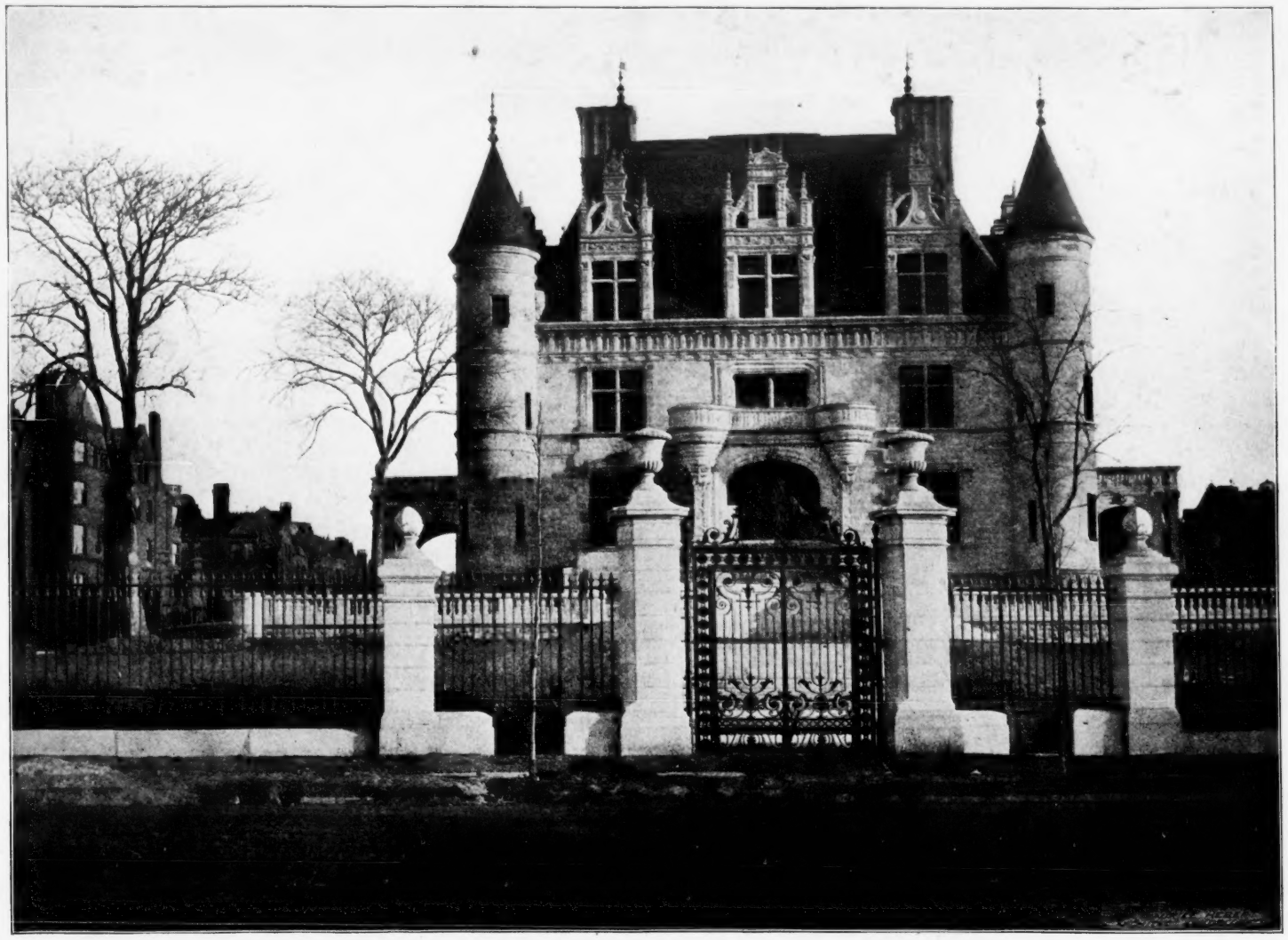
MAURICE HERBERT, ARCHITECT AND DECORATOR.

549. ST. PAUL AUDITORIUM, REED & STEM, ARCHITECTS. 489. CEMETERY AND RAILWAY STATION, PALMER & HORNBOSTEL, ARCHITECTS.

542-3. GEORGE WASHINGTON UNIVERSITY BUILDINGS, GEO. B. POST & SONS, ARCHITECTS.

515. COLLECTION OF PEWABIC POTTERY, MARY CHASE PERRY.

54. DESIGN FOR BANK, BALDWIN & PENNINGTON, ARCHITECTS.
255. PORTAL, ONTARIO POWER CO., GREEN & WICKS, ARCHITECTS.
256. SECTION, ONTARIO POWER PLANT, GREEN & WICKS, ARCHITECTS.
257. ELEVATOR TOWER, ONTARIO POWER CO., GREEN & WICKS, ARCHITECTS.
73. HOTEL, CHAS. I. BERG, ARCHITECT.
548. COMPETITIVE DESIGN, REED & STEM, ARCHITECTS.
652. GRAND CENTRAL TERMINAL STATION, NEW YORK, REED & STEM AND WARREN & WETMORE, ARCHITECTS.



RESIDENCE FOR CHARLES M. SCHWAB, NEW YORK CITY.

MAURICE HERBERT, ARCHITECT AND DECORATOR.

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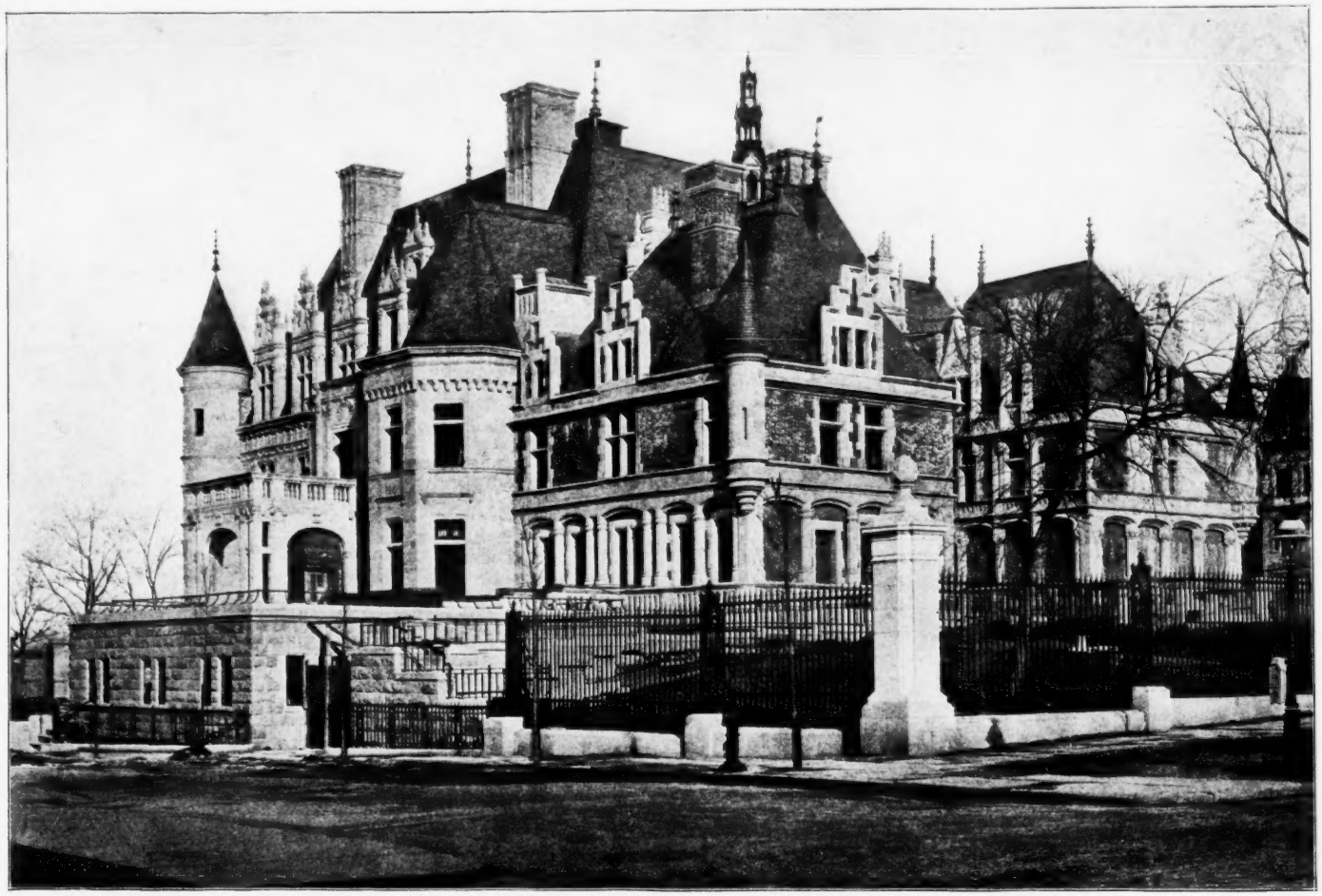

REAR VIEW, RESIDENCE OF CHARLES M. SCHWAB, NEW YORK CITY.

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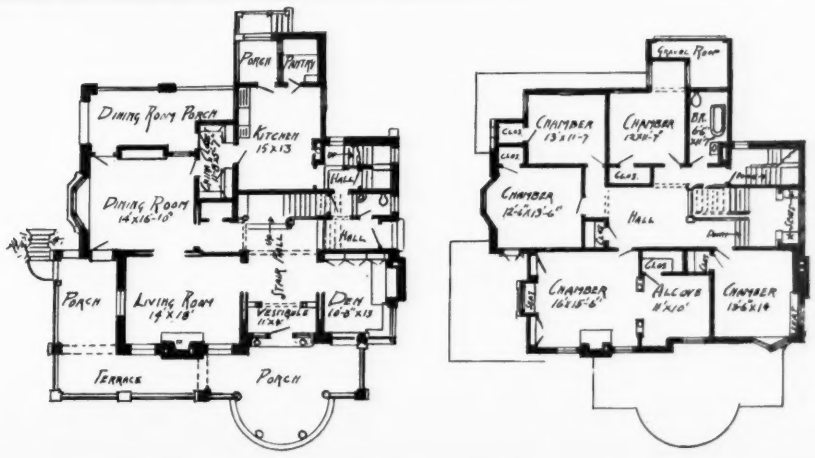
THE GEORGIAN COURT APARTMENT BUILDING, CHICAGO.

BORST & HETHERINGTON, ARCHITECTS.

RESIDENCE FOR FRANK F. ROZZELLE, KANSAS CITY, MO.
SHEPARD & FARRAR, ARCHITECTS.



MUNICIPAL IMPROVEMENTS

BY ALBERT KELSEY, ARCHITECT
CHAIRMAN OF COMMITTEE OF EXPERTS OF THE ART FEDERATION OF PHILADELPHIA

PART VI—TERMINALS, CONTINUED

HAPPILY, city and railway authorities are not always antagonistic, as some railways entering Boston show. Here they have agreed to improvements of mutual advantage, and in smaller cities, such as Madison, Wis., park boards have exacted authority enough to insure protection and even some adornment for their shabby suburbs and track traversed park areas. This is as it should be, for these often ragged districts may all be somewhat rehabilitated, though to be sure the interminably interwoven ramifications of some railway centers can scarcely ever be hoped to add anything much to a city's beauty. On the other hand, in special cases it is not beyond reason to hope that even some elegance and distinction may be given to the appearance of some parts of our cities by railway improvements. Indeed, in bringing some of our railroads to the highest pitch of efficiency such results are already in sight, the prospect being bright beyond even European precedent.

Before referring to these promising undertakings, right here it should be pointed out that of all the different types of buildings that we have forced upon lots and jammed into quarters not designed especially for them, railway stations are the ones that inevitably cause the greatest confusion. It is the one type requiring, sooner or later, the costliest readjustment, both to the city and to its promoters, and therefore it is the one to be the most carefully provided for in the beginning. That our building laws do not discriminate against stations, or, rather, that they do not single them out for special consideration (and there are many others, such as school houses and lofty buildings of all kinds, which should only be allowed to spring up on certain sites) shows that the cities and not the railways are to blame for the congestion which so often threatens them.

To return to the example of Broad St. Station, because this, better than any other example, shows the conflict, not only between a railroad and a city, but also between a private station and a costly City Hall, we find even more deplorable results; for now, having exhausted skill and ingenuity, the company is forced to side-track Philadelphia with its through trains (the third city in size in the Union), and in consequence a new center is slowly but surely expanding in West Philadelphia, on the site of the old station of a generation ago. Thus the logic of events has already proven here, as it inevitably will elsewhere, that a short-sighted and one-sided policy does not pay.

In a most scholarly design, Messrs. Zantzinger, Borie & Crét have worked out a scheme for the redeeming of the banks of the Schuylkill, in which a new railway terminal in West Philadelphia is intelligently worked out in its relation to the present street system and all probable future needs. Had such forethought been exercised in preparing for the original and more central terminal, Philadelphia today would not be becoming more and more of a way station, the appearance of the City Hall would have been heightened by a fine station square, three times as many property owners as now adjoin the station could have shared in the benefits derived from the terminal improvement, and lastly, and of the greatest importance, all possibility of congestion would have been minimized.

Even "that ash barrel of a station," as Kipling calls Charing Cross, in London, considering it as a civic problem, is much better. And badly as it and its driveways are planned, it provides, nevertheless, a fairly good carriage court. But in comparison with the Paris stations and others, presently to be referred to, it is antiquated and illogical in its arrangement, and is mentioned only by way of calling attention to an eminent layman's estimate of it.

The Gare St. Lazare, in Paris, represents a well balanced, economical and profitable type. It has two courts in front of it, partially separated in the middle by a large detached terminal hotel, the whole layout being arranged to separate incoming and outgoing street traffic. The court for arriving passengers being laid off with cab stands and refuges between which busses wait, the court for departing passengers being kept free for the rapid and uninterrupted circulation of all sorts of vehicles hurrying passengers and their baggage to their respective trains. Moreover, beyond these points where the streets focus, the city has provided covered shelters, thus doing its part even to the minutest detail of lighting and ventilating in a most efficient manner.

The rule of having arriving trains always on one side and departing trains always on the other is observed extensively throughout Europe, making it possible for strangers to readily find the baggage room they want (for there are usually two), the track or group of tracks from which their train will leave, or the cab stand from which they can be transported to any address. It is true the system has some disadvantages, especially in small cities and towns along through railroads, as it separates a station, thus adding to the cost of administration, and is frequently found to be inconvenient by passengers who do not remember which of the twin stations they are to depart from. But, on the whole, it is logical, simple and direct.

The Orleans Station, on the Quai d'Orsay, is among the most interesting of the many stations of Paris, noted for their grandeur and spaciousness, though it does not occupy as commanding a site as several others. Here, too, a terminal hotel forms part of the composition, and like the Paris, Lyons & Mediterranean terminal, it is a recent acquisition—in fact, the newest station to enrich the French capital—and while it was brought right into the beating heart of this, the most modern and the most finished city in the world, right into a closely built-up quarter facing the Seine and the Tuilleries Gardens on the opposite shore, the greatest care was taken to adequately measure the probable future traffic requirements in adjoining thoroughfares over a term of years, before the plans were seriously considered, and in preparing them, after the site had been agreed to, not only was an ample open court created, but the Quai itself was widened, two or three noble old trees were safeguarded, and the new railway line was entirely concealed beneath the drive. Moreover, in front of the station, the old river-wall was replaced by a much handsomer one, which alone forms a decided point of beauty and interest as seen from the

opposite shore, or from one of the many swift little river boats, which, like our trolley cars, are daily patronized by thousands coming and going from work.

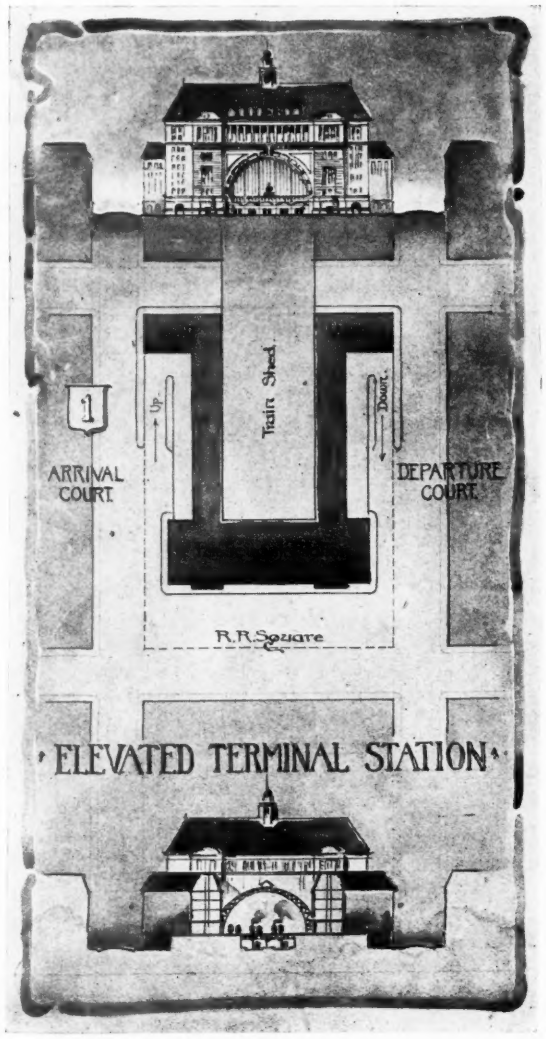
In all cases the problem to be solved is facility of circulation; for arrangement of the two tendencies, concentration and distribution. These two tendencies are yet working side by side in most cities and must be brought into some relation before the city can assume a unified nature. In the underground and overhead systems we have reached the highest stage of progress in distribution, while the tendency toward concentration is best illustrated by the great depot which is most centrally located with the greatest number of streets and local transit lines radiating from it, and which provides either by loops or a through line for a continuous circulation of its rolling stock. The use of turn tables and cross-overs and switching near a station must be greatly reduced in most track yards before the transportation problem in great cities is properly solved.

In Paris alone four terminals stand at the ends of important streets. In some of these cases as in many others in continental cities, a great tree-lined boulevard and two or more minor thoroughfares focus on them. or conversely the thoroughfares radiate from the terminals. Moreover, the facades of these buildings in nearly every instance are dominated by one or more colossal glazed archways, through which the bright blaze from a lofty interior attracts from afar on the darkest nights. These great disks also by night and by day give character to the buildings by expressing the ends of long train sheds behind. Many American terminals fail in this particular, for as yet the railroad is not considered as an artery of the municipality. The tendency of concentration, however, is well understood from a mere railroad standpoint, for where acres of land are required abroad for auxiliary buildings for the companies' offices, we minimize the space required by building our stations with head-houses as high as may be necessary to accommodate the business. But ever in the van of progress we may combine the great arch and the office building some day to good advantage and our early experiments will then justify themselves. The accompanying sketch shows how it may be done.

The actual center of metropolitan life should be a great terminal square; here the street car system which gathers in its passengers from many points should have ample room to discharge them, though the really modern method is to carry loops right into the terminal building, thus enabling the traveler to leave the car under the same cover his train departs from. But even where this is done the great railroad square is still needed, for there are always private vehicles, cabs and hotel omnibuses to be provided for, and on occasions of celebration there should be room for the formation of processions, etc., at these points.

At Frankfort-on-the-Main there is a good modern terminal building, through which traffic has a clean sweep. It is hard to imagine one where the union of highways and railways could be better merged.

At Paris the old Gare Montparnasse provides ample ramped carriage drives up to the track level, so that arriving passengers leave it from a massive stone terrace from which their first impressions of the city spreading out below are agreeable and impressive.



The new terminal at Antwerp has its tracks elevated, and has a uniquely constructed train shed with its arched trusses springing from the street level below and up again and outward, as it were, slightly cantilevered over the sidewalks and cab stands. Thus the great weight of the roof is brought directly down onto the ground where the lateral thrust of the arches can best be taken up, and at the same time the overhang offers shelters on two public highways.

In connection with terminals for elevated roads a frequent mistake lies in placing the ticket offices on the ground floor, but if sometimes such an arrangement can not be avoided, it should at least be recognized as unfortunate by giving these offices a position which can be seen at a glance from both floors and which can be easily reached from above.

Because a problem is large and because a broad treatment is demanded for its proper solution, does not in any wise exclude the closest attention from being given to its finish and detail. Indeed, at the end of one of the great train sheds in Paris, a monumental clock has been worked in with the constructional work in a most interesting manner, and in many others the trussing has been ornamented in a way as yet unknown in this country.

(To be continued.)

SANITARY ENGINEERING IN THE MODERN OFFICE BUILDING

BY J. PICKERING PUTNAM, ARCHITECT

PART VII

IF THE friction is increased by more or less clogging the siphonage is by so much easier.

The only weak point in the employment of the ordinary unvented "pot" or "drum" trap of large size as a substitute for the system of back venting is that such a trap is not self-scouring.

This weak point is referred to by advocates of back venting as sufficiently important to justify the condemnation of the whole system of unvented trapping.

We have explained the fallacy of this argument by showing that the vent pipe is *still less* self-scouring and that, once clogged, it can not be so easily cleansed. Nevertheless, it must be admitted that the cesspool element in all reservoir traps is a very undesirable feature, and that not the least of its objections is the fact that it furnishes the opposition with an argument, however inadequate, against the use of the simpler system of plumbing.

Moreover, the use of cesspools in a system of house drainage is contrary to the first principles of sanitary engineering, and an evil which may be of comparatively slight importance when confined to the small proportions of a single fixture trap, becomes of very great importance when multiplied by thousands or hundreds of thousands in the complete drainage system of an entire city or town.

It is also perfectly true that the clogging up of the ordinary drum trap converts it in time into an S trap, and completely deprives it of its antisiphon feature. So long as it is allowed to remain clogged, a system based upon the use of such traps loses its efficiency and, however far superior it may be to the "back vent" system, it can not yet lay claim to permanent efficiency with automatic action.

Hence it is all important to know if the cesspool element of the common antisiphon trap can be eliminated and the self-scouring property of the simple S trap or of a straight piece of smooth pipe of equal area can be combined with the antisiphon quality of the ordinary drum trap.

For over a quarter of a century persistent and untiring efforts have been made to attain this combination, until at last it became generally believed that the two requirements were really antagonistic to one another and that the solution, therefore, was as impossible as the discovery of flexible glass or transparent rubber, a large body of water and a deep seal being assumed to be necessary to withstand siphonage and the exact reverse being needed to produce the maximum of self-scouring effect.

It was found that resistance to siphonage increased with the increase of water head in the seal of the trap, and it is sufficiently evident that even in an S trap a seal deep enough to balance the weight of the atmosphere, say 32 feet, would be able to resist any siphoning action which could be brought to bear upon it, since Nature's abhorrence of a vacuum ceases under a water pressure of 32 feet. Accordingly the idea has prevailed that depth of seal is an essential quality in antisiphon traps, and nearly all such traps have been and are being constructed on this assumption.

I shall endeavor to show that this idea is fallaceous and that exactly the reverse is essential to meet all the requirements of the problem.

It does not follow that because a depth of seal of 32 feet is capable of resisting completely siphoning action, there is no other equally efficient manner of accomplishing the same result without the objections attending the perpendicular form.

These objections are, first, the impossibility in practice of finding sufficient room under a fixture to give an unvented S trap the depth of seal required for adequate protection against the strongest siphonage encountered in plumbing practice. Four or five feet of such seal would be essential in an unvented S trap for entire safety. I have broken the seal of such a trap nearly six feet deep on the hydraulic apparatus shown in Fig. 20.

Secondly, the resistance to the outflow and consequently the lowering of the scouring effect of water through the use of so deep a trap, and, finally, the prohibitive cost of its manufacture and installment.

Fortunately, there is another method of overcoming siphoning action besides that of opposing direct resistance thereto, namely, the diametrically opposite one of *reducing the resistance to a minimum*. This is accomplished by forming the shallowest possible seal, but constructing the trap in such a manner that the seal shall simply move to one side for a moment and allow the air of siphonage to pass, and then return to its place. It is an application of the principle which gives success to the reed in competition with the oak. It bends to the storm and rises again when its fury has passed, while the oak is shattered by its opposition.

Nor does it follow, fortunately, that because a seal is very shallow it must on that account be a correspondingly weak one. I have found that a trap may be constructed in such a manner that the shallowest possible seal may have a strength so great as to be absolutely irresistible. A seal a quarter of an inch deep may be made in such a way as to withstand indefinitely the severest test of siphonage back pressure, evaporation and all other adverse influences to be encountered in plumbing. It will withstand unvented a strain of siphonage powerful enough to destroy the seal of a fully vented S trap or of a drum trap of the largest diameter.

In my various experiments on the behavior of different sizes and forms of drum traps when subjected to siphoning action, I have found their resistance to be in direct proportion to their diameter rather than to their depth of seal. Indeed, the latter has, within the narrow limits practicable in construction, no appreciable influence whatever.

(To be continued.)

NOTE.—Figure referred to is on page 40, November issue.

PROCEEDINGS OF THE CONVENTION OF THE ARCHITECTURAL LEAGUE OF AMERICA.

THE sixth annual convention was held in New York City on January 31, February 1 and 2, 1906. There were in attendance fifty-seven delegates and representatives of the associated clubs. The Architects' Club of the University of Illinois was represented by members of the senior class in architecture, twelve in number, in charge of Prof. Newton A. Wells. These young men with their "yell" were an interesting feature of the convention, the rides and the League dinner. It is certain that they returned to their studies with increased enthusiasm, and a better conception and higher ideals of the profession of architecture. The architectural press was represented by Mr. Saylor, of the *Architectural Review*, Mr. Wise of *Indoors and Out*, and Mr. Muller of THE INLAND ARCHITECT. The attendance in detail was as follows:

Architectural League of New York.—Messrs. D. Everett Waid, Charles I. Berg, Frank E. Wallis, Stockton B. Colt, Birch B. Long, Alex. Rice McKim and Arnold W. Brunner.

T Square Club, Philadelphia.—Messrs. John T. B. Sinkler, John Molitor, Andrew J. Sauer, Albert Kelsey, Nicola De Ascenzo, Arthur L. Nicholson, H. Parker and Mr. Weaver.

Cleveland Architectural Club.—Messrs. S. E. Gladwin, W. A. Bohnerd and Albert Skeel.

Toronto Architectural Eighteen Club.—Messrs. J. M. Lyle, J. C. B. Horwood and J. P. Hynes.

San Francisco Architectural Club.—August G. Headmann.

Pittsburg Architectural Club.—Messrs. George Ingham, E. B. Lee and John T. Comes.

Brooklyn Chapter, A. I. A.—Messrs. Quinby, W. E. Parfitt and Julius Harder.

Twin City Architectural Club.—Hugo Arnold.

Chicago Architectural Club.—Messrs. Edward O. Nelson, John Fischer, Harry Kniseley, Joseph C. Llewellyn, Adolph Bernhard, N. Max Dunning and Hugh N. G. Garden.

Detroit Arhitectural Club.—Messrs. Solomon Rosengarten, Prof. Emil Lorch and F. O. Lewis.

St. Louis Architectural Club.—Messrs. William B. Ittner, Ernest Helfensteller and E. J. Russell.

Washington Architectural Club.—Messrs. Prof. Percy Ash, Leo J. Weisennborn and G. O. Totten.

Architects' Club, University of Illinois.—Messrs. Ralph C. Llewellyn, Newton A. Wells, C. C. Rich, J. McCoy, E. A. Stanley, C. C. Horner, L. E. Wilkinson, G. Awsumb, E. N. Dugan, E. G. Oldfest, H. F. Robinson and M. Schober.

Milwaukee Architectural Club.—George B. Ferry, of Ferry & Clas.

National Society of Mural Painters.—Messrs. F. S. Lamb and W. B. Van Ingen.

National Sculpture Society.—Messrs. Karl Bitter, George T. Brewster and Thomas Shields Clarke.

The delegates assembled for the opening session Wednesday morning, and were welcomed by Richard Howland Hunt, president of the Architectural League of New York. He said that during the last few years there has been a harmony between the local societies devoted to architecture which did not before exist. This was because the league had served as a sort of clearing house for the societies, each of which had concluded to attend strictly to its own business on the theory that only one thing may be done well at one time by a person or organization.

The address of the president of the Architectural League of America was then delivered by N. Max Dunning.

THE PRESIDENT'S ADDRESS.

Gentlemen—In behalf of the Architectural League of America and in behalf of all here assembled, I wish to thank the National Sculpture Society, the National Society of Mural Painters and the Architectural League of America for the splendid reception that they have accorded us, and for the splendid evidences of entertainment that are given us on the program which we have before us. I also wish to thank Mr. Hunt for the gracious words in which he has given us welcome.

We are here, gentlemen, on an important mission, to legislate wisely for the future expansion of the League's work and to give that work such direction as will bring about the best possible results. The work which the League has accomplished should give us ground for great optimism. The work which still lies before the League in possibility of accomplishment is worthy of the most serious thought and careful consideration. We have arrived at the seventh year of our age, and with each year has come a better definition of purpose, a more clearly defined grasp of what our mission is as an architectural organization. With each year also has come an increased responsibility, for increasing power, and the responsibility for its judicious application go hand in hand, and should never be lost sight of. The conventions of the Architectural League of America are not unlike the observations taken by a ship at sea. The latitude and longitude are found, the mistakes of the past voyage are corrected, and the ship sets its course straight for its destination. The Architectural League has made mistakes; the Architectural League will make other mistakes in the future. That need not particularly embarrass us; we may not particularly regret them, for it is through error to a large extent that we learn the truth. In some of our projects we must admit failure, but we must work indefatigably for success. In all of our projects we must be inspired by a noble purpose consistent with our high ideals as an organization; and in all of our projects we must work to the end that our architecture will assume the dignity of a profession, both by its practitioners and by the public, who are fast awakening unquestionably to a better appreciation of art. It seems to me that in this public awakening to the value of art lies one of the great fields for usefulness of the Architectural League of America. With our power as an organization we can accomplish a great deal in directing public sentiment in channels that will be productive of great good. The governing board of the Architectural League should be the clearing house of the highest and best ideas of archietcture in its broadest sense as it relates to architecture and painting and sculpture and gardening and the making of cities, and everything that comes under that vast head. The thoughts that are given out, the directions given by the governing board can be best worked out through our constituent clubs, understanding as they do, all of the peculiarities of their local conditions.

One of our great fields for the Architectural League of America is the educational field—the education of young men. We have in our organization hundreds of young men whose minds are supple, who are susceptible of good influences or to bad influences. The teachings that go from the central body, the teachings that go from each of the constituent clubs should always be an inspiration to these members to become better architects and to hold a higher ideal of their professions. The habits of thought and study of these young men are being formed, and you can appreciate for yourselves the wonderful influence it would have upon the future generation of architects that these minds should be so molded that they would develop into a high regard for the esthetic side of architecture, becoming in consequence better men.

Before closing—I do not intend to make much of a talk—I wish to thank the members who have acted with me as officers, and of the executive board of the League for the splendid work they have done in the cause. I also wish to thank the members, the secretaries and the chairmen of the different standing committees for the faithful way in which they have performed their duties that have been set before them to accomplish, and also to thank those individual members in each of the constituent clubs who have carried out in splendid shape every direction that has been given them by the central bodies. Without this hearty coöperation on the part of these men the work of the League this year must certainly have been a failure, but I think there are a great many signs that should give all of the members and all of those interested in this work great cause for optimism.

The first business of the convention was the appointment of a committee of three on publicity and records. These were named: L. Muller, Albert Kelsey and Hugh M. G. Garden.

The election of speaker and secretary of the convention was

next in order. This resulted in the selection of D. Everett Waid for speaker and Albert E. Skeel for secretary.

The annual report of the executive board was presented by N. Max Dunning.

REPORT OF THE EXECUTIVE BOARD.

Your executive board respectfully submits the following report:

As provided by the constitution of the League, your president, representing the Chicago Architectural Club, selected the following gentlemen from that club to act with him: Richard E. Schmidt, vice-president; John L. Hamilton, secretary; Hermann V. von Holst, treasurer; Alfred Hoyt Granger, Howard V. D. Shaw and Elmer C. Jensen, who, together with your president, N. Max Dunning, have constituted the executive board.

The meetings of this board have been held approximately every two weeks, at which time questions of routine business have been taken up and disposed of.

The executive board has been particularly fortunate this year in having had its line of action largely mapped out for it by the convention in Pittsburg, and has bent its efforts toward putting into active operation, the projects recommended by the retiring board, and by the standing committees in their reports to that convention.

We have succeeded in a measure, and I am pleased to report the following results:

School Scholarships.—In our effort to establish scholarships in the architectural schools of the country, we met with a most generous response from the "President and Fellows of Harvard University," receiving from them by gift, three scholarships in architecture, each equivalent to one year's free tuition at Harvard. Two of these scholarships are awarded upon the result of a competition in design conducted and judged under the auspices of the League, in the various constituent clubs and open to any of their members.

The third scholarship is awarded to that member of the League who passes the highest regular entrance examination.

The first competition for these scholarships was held simultaneously in all of the clubs last September and two scholarships were awarded. The men receiving these scholarships are at present pursuing their studies in Harvard. While there were but few competitors, this fact was easily attributable to the short notice that it became necessary to give of the competition and would be an unfair criterion by which to judge of the success of the scholarship idea.

Announcements have been issued for the second competition, which will be held early in March and upon the result of which the scholarships for next year will be awarded.

It is only due to the President and Fellows of Harvard and to Professor Warren, who has so earnestly championed our cause, that a large number should compete and show that we are deeply sensible of the great assistance they have given us in carrying out our program of education.

While we have not as yet received scholarships from other architectural schools, the manner in which they have taken up the question and the interest shown in its possibilities, leads us to a reasonable expectation that eventually we will have other scholarships to offer to our members.

The executive committee respectfully recommends that this work be carried on.

Traveling Scholarship.—We have also secured pledges of the funds necessary for establishing an Architectural League of America Traveling Scholarship of a value of $1,200. A part of these funds are already in the League treasury and we anticipate no delay in receiving the remainder.

Announcement of this competition has already been sent out, and the program has been written, but this will not be made public until the time of the preliminary competition.

It has been the intent of the executive board to make the restrictions as to eligibility as broad as can be made, consistent with the best interests of the scholarship and its recipient.

We will require of all competitors, an essay in which they will set forth their opinion as to what is the function of such a scholarship as this, and what, if any, are their natural predilections, with the intention that their designated study may be made congenial to their tastes and impose the least possible restriction on the individuality of their work.

We will require that the holder of the first scholarship observe particularly some designated subject pertaining to the improvement of cities, and report to the executive board.

Your executive board has given this question of a Foreign Traveling Scholarship deep consideration, and are greatly impressed with its future possibilities and inestimable value.

We therefore respectfully recommend that this project be continued and developed.

We would further recommend at the earliest moment it may be found expedient that the League establish traveling scholarships in mural painting and in sculpture.

The Annual.—A contract has been signed with Mr. John C. Baker, of Philadelphia, to assume the management of *The Architectural Annual,* and this work will be carried to completion without the League assuming any financial responsibility whatever. The work of soliciting advertisements for this volume has been begun. We are arranging for an editor to assume the duties of compiling the printed matter.

We have also communicated with the various clubs securing permission to select plates from their 1906 catalogues and have met with favorable responses from all but one, and there is no doubt that we will be able to secure any plates we may desire in this case.

We have every reasonable assurance that *The Architectural Annual* will not only be a volume which will be a credit to the Architectural League of America, as a résumé of the current work in architecture, painting and sculpture, but that it will also maintain the foreign traveling scholarship in architecture and probably in the near future, in alternate years, scholarships in sculpture and mural painting.

Your executive board respectfully recommends that this venture be given an impartial trial.

The executive board wishes to commend most emphatically the splendid work done by the committee on education, of which Prof. Newton A. Wells is chairman, and of the committee on civic improvements, of which Mr. Frederick S. Lamb is chairman, and of which you will hear in detail when their reports are made.

In making this special mention, however, we do not wish to imply that the work of the other committees has been less zealous or attended by less successful results.

The executive board have had published the document issued by the committee on education and have also had published in pamphlet form, the report of the committee on civic improvement, as authorized by the last convention.

An edition of 2,000 copies was issued and distributed among the constituent clubs.

Recapitulation—Your executive board recommends: (a) That an effort be made to increase the number of scholarships in the architectural schools. (b) That the *Architectural Annual* be continued as an organ of the League. (c) That the traveling scholarship in architecture be continued. (d) That scholarships in mural painting and sculpture be established. (e) That the present standing committees be all continued. (f) That the question of periodical bulletins be considered. These to set forth the prospective work the League has in mind in order that it may be incorporated in the programs of the various clubs. (g) That special committees be appointed or elected to take care of the work in connection with the traveling scholarship and *The Annual.* (h) That the chairman of the committee on current club work should be selected from the city represented by the executive board. That a committee be appointed to look in the circuit exhibition. (i) That archives for the preservation of club documents should be established. (j) That a committee on foreign correspondence be made a standing committee. Their duty to bring about a closer harmony between our organization and foreign similar organizations to the end that our traveling scholars shall be given a better standing and increased opportunities while abroad, and the international question of better government as expressed in concrete examples of civic improvement may be more universally studied and the knowledge more systematically disseminated. (k) That the Architectural League of America appoint a delegate who is thoroughly familiar with the league's work and ideals to attend and represent it at the World's Congress of Architects to be held in London in July. Our position as an architectural body and our interest in the progress of architectural thought seems to demand that this be done.

It is the opinion of your executive board that, considering the personnel of our society, the sphere of its greatest usefulness is an educational one in the broadest sense. That we must use our good offices to encourage in the minds of the younger members of our organization high ideals of architectural expression and professional practice.

And finally, that we shall exert in the greatest degree possible a strong influence in molding the public mind to a better appreciation of art.

A special committee was appointed to receive and report on the reports of standing committees. The special committee was composed of J. C. Llewellyn, William B. Ittner, S. E. Gladwin, Percy Ash, and Albert Kelsey.

Wednesday afternoon the convention was the guest of the National Sculpture Society. The party to the number of sixty was taken in automobiles to see some of the noteworthy examples of sculpture used to adorn buildings. The following were especially interesting: Fifty-seventh street, Carnegie Music hall; Forty-fourth street, New York Yacht club; Forty-fourth street, Bar Association; Forty-fourth street, Sherry's; Forty-fourth street, Delmonico's; Fifth avenue and Forty-second street, New York City library; Fifth avenue and Thirty-seventh street, Tiffany's new store; Fifth avenue and Thirty-sixth street, Gorham's new store; Fifth avenue and Thirty-fifth street, Altman's new store; Fifth avenue and Thirty-fourth street, Knickerbocker Trust Co.; Fifth avenue and Thirty-fourth street, Hotel Waldorf-Astoria; Madison square and Twenty-seventh street, statue, "Farragut," by St. Gaudens; Madison square and Twenty-seventh street, Madison Square Garden; Madison square and Twenty-sixth street, Appellate court; Madison square and Twenty-fourth street, Dr. Parkhurst's church; Madison square and Twenty-third street, Metropolitan Life building; Twenty-third street west to Broadway; Union square, Lafayette and Washington; Broadway, New York Life, other skyscrapers; Broadway, City hall; Broadway, St. Paul's church; Broadway, Trinity church; Wall street, U. S. treasury; Broad street, Stock exchange; Broadway, Bowling Green; Broadway, new custom house.

Ferry was then taken to St. George, Staten Island. Here is finishing the city hall, to cost $750,000, the work of Carrere & Hastings. A dinner was given the guests at Hotel Castelton. Returning by ferry the skyline of New York was the subject of much interest and comment.

THURSDAY'S SESSION.

First in order of business were the reports of standing committees. Tha chairman of the committee on education, Newton A. Wells, presented his report, which was followed with the greatest interest and appreciation. (This report is appropriately given especial prominence on another page of this number.)

The report of the committee on publicity and promotion was read by the chairman of the committee, John Molitor.

REPORT, COMMITTEE ON PUBLICITY AND PROMOTION.

We as an organization have responsibilities; we have duties to perform, as well as rights to enjoy; the right to enjoy distinction must first be won by doing our duty in directing and forming public taste, and in building up a system of education for the coming generation, who are working in our offices. Our effort should be to try and bring architectural study to the draughtsman who really needs it,—who is unable to go to the universities for his training. To bring it to the place where he works, to give him at least the theory or foundation of architecture. We should adopt some system or policy of furnishing a curriculum to those who, devoting their lives to architecture, have heretofore had nothing outside the problems of office work; who feel the necessity for more knowledge and want to study as much as their means will permit.

The San Francisco Architectural Club and the George Washington University Club have joined the league since the last convention was held in Pittsburg. This result was not due especially to the work of this committee, but to the good name which the league has established for itself. Following up the work of the previous committee, we have communicated with the following clubs in regard to their joining the league and supporting us in our work: Kansas City Architectural Club, Boston Architectural Club, The Gargoyle, Cornell; The Pen and Brush, Harvard; The Architectural Society of the University of Pennsylvania; The Architectural Society of Columbia University, The Architectural Society of the Massachusetts Institute of Technology.

We have also selected the names of prominent architects in some of the smaller cities, and have asked them if there existed in their city a local society of architects and draughtsmen, and, if such was the case, that they would place us in communication with its officers, and enable us to present the work of the league to them. With this object in view, the following cities were selected: Hartford, Conn.; Portland, Maine; Montreal, Canada; Indianapolis, Ind.; Denver, Colo.; Omaha, Neb.; Louisville, Ky.; New Orleans, La.; Atlanta, Ga.; Richmond, Va.; Baltimore, Md. Replies have been received from most of these ctities, showing that the number of architects is small, and that it is not possible for a society to exist under present conditions; but we believe that with the advance in the architectural development of this country that the numbers of practitioners will increase so that in a few years it will be possible to form and organize societies of architects in these communities. We would suggest that the league keep in touch by means of correspondence with architects in these cities, and encourage them to organize societies when local conditions seem to warrant.

A sufficient quantity of booklets containing the constitution and by-laws of the league should be in the possession of this committee for proper distribution, also each standing committee should have its own letter heads and envelopes, with the address of the chairman. The standing of the architectural societies in our universities should also be definitely established by this convention, in order that they may be admitted as junior societies, as was evidently the sentiment of the delegates of the last convention at Pittsburg. We should endeavor to concentrate our energies so as to make our organization count for doing the most effective work.

Charles S. Schneider, chairman committee on current club work, was not present and his report was read by a member. It was a very thorough paper on the activities of the associated clubs.

The committee on co-operation with the A. I. A., E. J. Russell, chairman, reported the successful issue of its object through the action of the A. I. A. in referring to its committee on education as desired by the A. L. A. the motion to co-operate in securing scholarships, etc.

The report of the committee on civic improvements was presented to the convention in printed form by Frederick S. Lamb, chairman. It follows in abridged form:

RFIORT, COMMITTEE ON CIVIC IMPROVEMENTS, A. L. A.

No question has aroused more interest than that of recent municipal improvement. Many cities have not realized at the start that they were under the influence of this movement, but improvements suggested and begun, seemingly almost without forethought, have led, sooner or later, to a careful study of this important question. Practice always goes before precept, and in a strange way, individual and insular efforts have led, in the long run, to wider development. Careful analysis will show that most of the cities have been led to their present position by the public interest in park development; and that as provision has been made for increased park area, it has but partially answered the question. A feature from which much has developed is the grouping of public buildings. Another interesting aspect of the general advance is the realization that parks and public places should be associated. In fact, it is most interesting to note the concession on the part of the public, as indicated in the almost universal recognition of the necessity of the location of parks and buildings at the same time.

While granting that much has been accomplished, those studying the problem of civic improvement seriously have not been satisfied with the conclusion reached by the cities which have, up to the present time, been most advanced in their work. This leads to the conclusion that all that has been done by our cities up to the present time has been but experimental, and that the city of the future, to be successful, must take into consideration, not only one, but *all* of the phases of municipal improvement, and should start with a concrete, practical and logical plan of development in advance of the execution of minor improvements.

To aid those desirous of information it would not be amiss to give a brief résumé of what has been accomplished or is being projected, in a few of our cities and towns:

Hartford, Conn.—The most important improvement which has been made since the building of the capitol is the purchase of a tract of land from the New York, New Haven & Hartford Railroad Company, to give additional area to the capitol grounds.

Amherst, Mass.—Has a scheme to develop the college buildings and grounds with a view to accomplishing something similar in plan to the University of California.

Boston, Mass.—While much interest in civic improvement has been shown in Springfield, Mass., as well as many of the smaller New England cities and villages, the most pronounced example of accomplished as well as projected work is Boston. As early as 1893 a comprehensive park system was adopted and in accordance with the scheme laid out, some 15,000 acres of parks and twenty-five miles of parkways have been acquired. The cost of this vast territory was in the neighborhood of $33,000,000 and the yearly expenditure for maintenance is over half a million. One of the most important muncipal improvements now in progress is the transformation of the Charles river basin into a body of fresh water. This stupendous undertaking will probably be completed within three or four years.

Harrisburg, Pa., is one of the most energetic cities in behalf of municipal improvement. In 1901 comprehensive reports were secured by public spirited citizens on water purification, sewage revision, park system, etc., etc. Through the energy of the Municipal League, an appropriation of $1,000,000 was secured to carry out these recommendations.

Philadelphia.—Philadelphia has not abated in her energy in civic matters. Work is progressing on the new water system begun some three years ago, which will cost some $20,000,000 when completed. A movement which has long been under consideration for the cutting of a broad roadway diagonally from the city hall to Fairmount park has resulted in an appropriation of $2,000,000 for commencing the work.

Pittsburg.—The Pittsburg chapter of the A. I. A. submitted to the public last spring an interesting plan for the grouping of the public buildings of Pittsburg, thus creating a civic center.

Baltimore.—A commission known as the Burnt District Commission was appointed, and appropriation of some $23,000,000 placed at its disposal, to be expended on park improvements, sewer system, street paving, the construction of fire houses, school houses, etc., etc. In a recent communication the commission states: "Our burnt district is being built up rapidly and the new buildings are far superior to the old ones. For instance, the Appeal Tax court's valuation of the burned buildings was $12,908,300. So far permits have been issued for 451 buildings, the value of which is placed at $16,000,000.

Annapolis, Maryland, affords an instance of a most complete plan for the rebuilding of the Naval academy, founded in 1848. It is proposed to expend some $10,000,000 upon the work.

Washington.—It may be of interest to note that the work already under way consists of: A union station at the intersection of Delaware and Maryland avenues, facing the dome of the capitol, less than a half mile distant; the new office buildings for the Senate and House of Representatives, facing the square of the capitol on the north and south; buildings for the Department of Agriculture and National museum, which have been placed within the Mall; the hall of the Daughters of the American Revolution; building for the officials of the District of Columbia, in the Pennsylvania avenue triangle; congress has made an appropriation to secure a design for the Lincoln memorial and designs have already been selected for statues of General Grant, General McClellan and Baron von Steuben. The proposed park system consists of sixty-five miles of parkways, connecting 8,000 acres of park lands. The recommendations of the commission include the reclaiming of the Anacostia flats, a large riverside park, and a chain of driveways to connect the hilltop forts near the city.

New Orleans.—An appropriation has been made for sewer and water improvements; a parkway connecting the two principal parks has been authorized; a bond issue of $2,000,000 has been granted to improve the wharves of the city; some $2,500,000 is to be expended upon a railroad terminal on the Central boulevard.

Buffalo.—Although a great railroad center, Buffalo has had no adequate station. The recent scheme for improving the city plan provides to give the city a fitting entrance, by clearing the buildings from a large triangular area. To the north will be erected the new union station. On the other sides of the triangle are broad avenues, facing the proposed park, on which public buildings may be grouped, the city hall already standing in the desired position.

Detroit, Mich.—Through the instrumentality of the Detroit Architectural Club, an art commission has been appointed to beautify the square in front of the county building.

Cleveland.—The elaborate scheme for Cleveland, Ohio, is so well known that a detailed description is unnecessary. The group plan submitted by the commission in charge of the work, in 1903, is being carried out as fast as is practicable. The total cost of the proposed improvements is estimated at $14,853,105.

Chicago.—While Chicago has not as yet a carefully developed city plan, it has and *is* undertaking many important municipal improvements. A county building is being built at a cost of about $5,000,000. The question of a comprehensive plan, taking into consideration the transportation problem, the docking requirements, park systems and the future grouping of public buildings, is now being agitated under the direction of the Municipal museum. The special parks commission recommended the acquisition of twenty-two sites, eleven of which have been secured. An appropriation was also granted for park buildings, containing in each case a gymnasium and assembly rooms for the use of any meetings not specifically religious or political. These park buildings are also provided with club rooms for the "neighborhood clubs." The special park commission has also maintained nine playgrounds in the congested districts of the city, the attendance of which was 1,300,000 during the year 1905. Grant park, on the lake front, in the heart of the city, with an area of 210 acres, is nearing completion and will contain the Field Columbian museum and probably the Crerar library, two buildings of grand proportions. The problem of how to relieve the congestion of traffic, which is said to be greater than that in any similar area in the world, has been solved by the construction of an intricate system of tunnels at a level of forty feet below the surface of the streets. These extend beneath every important street in the congested districts and reach most of the terminals of the thirty-eight railroads which enter Chicago. Within the tunnel area, it is stated that 70,000 vehicles are daily employed, hauling 110,000 tons of merchandise. The comment has been made in a recent article that "while London and New York have decided to carry the people below the street surface, Chicago intends to carry its freight there and to release its street for the use of the people." The first municipal museum in the United States was formally opened in Chicago on February 23, 1905. Through a bequest of the late Benjamin Franklin Ferguson, the income of $1,000,000 is to be expended for the city, under the direction of the Art Institute, for municipal enrichment.

St. Louis, Mo.—The necessity of new public buildings in St. Louis has resulted in the appointment of an official commission which has submitted a comprehensive plan for the grouping of public buildings. The scheme suggests taking the recently completed city hall as the starting point of the group, which will face a municipal court. Opposite the city hall it is proposed to place the new Four Courts, and at one end the public library. Among the other buildings included in this scheme are a law library, police department headquarters, fire department, executive buildings, and museums. While St. Louis has fine parks, they lack fitting connection. Through the efforts of the St. Louis Architectural Club, commissioners were appointed some three years ago to study the question. The report recently presented proposes the extension and improvement of the King's highway.

Milwaukee, Wis.—The existing parks are being connected by boulevards, and it is proposed to continue the parks along the lake front.

Denver, Colo., is the recipient of many recent public improvements through private donorship, including street fountains, a gateway to the City park, and a triple arch entrance to the city from the Union depot.

San Francisco.—San Francisco has recently shown great interest in the question of civic improvement and is now preparing a well-defined plan for the city's development. An important

feature of the scheme in mind is the Civic Center, which will be located at nearly the geographical center of the city, and about which will be grouped the public and semi-public buildings, including the city hall, postoffice—fine new building just completed—the public library, opera house, municipal theater, Academy of Art, museums of art and natural history, and several others, all within a radius of a dozen square blocks. The site has already been purchased for the library, and a million dollar building will be started within a year. The necessary area will be acquired as fast as is practicable. The scheme also includes a Union railway station, which shall be on the principal radial line from the Civic Center, and not more than ten minutes ride distant. A most interesting feature will be the hill-top parks, which are possible from the many beautiful hills of the city. These will be preserved in their natural state as far as is possible, and will command fine and varied views of the city. Market street, the most important thoroughfare of the city, ends at Twin peaks. The plan provides, however, that it shall not stop here, but wind its way to the top of the hills, from which it will descend by a broad boulevard past Lake Merced, and finally join the great circular boulevard. While the plan in view involves the expenditure of many millions, and will require many years for its completion, the eminent architect whose services San Francisco was so fortunate to secure says: "We must not forget what San Francisco *has* become in ten years—what *is* it still further to become? We must remember that a meager plan will fall short of perfect achievement, while a great one will yield large results even if it is never fully realized. Our scope must embrace the possibilities of development of the next fifty years."

Canada.—The Dominion government in 1899 established the Ottawa Improvement Commission, endowing it with a revenue, while the city of Ottawa, on its part, turned over to the commission the administration of its parks and boulevards. The commission called to its services a landscape architect who prepared an exhaustive report on the possible improvements to Ottawa and vicinity. Besides the ordinary parks and boulevards which are usual to all cities, the report recommended the procuring of two of three forest reservations within easy driving distance of the city, to be reserved and maintained in their natural condition, and also an extensive driveway along the Rideau canal. This report has been acted upon by the commission, who have already carried out many of the suggested improvements, upon which, up to October, 1904, the commission has expended about $400,000.

New York.—It remains but to speak of New York. Fortunately, New York now has an opportunity to guide its municipal improvement. The New York City Improvement Commission was created by an ordinance of the board of aldermen, on December 9, 1903, to prepare a comprehensive plan for the development of the city. The commission presented to the mayor its preliminary report on December 14, 1904, which was published in a pamphlet of thirty-one pages of text and twenty-two illustrations giving a comprehensive plan of development that shall include: Improvements for river fronts, connecting parks, approaches to the bridges, traffic facilities, the grouping of public buildings, etc. It is expected that within two years the system of tunneling the North river will be in operation. Two tubes are already under construction, and two others are about to be started. Hardly of less importance to the general public than the recently completed subway are the reconstruction of the Grand Central station of the New York Central & Hudson River railroad, and the tunnel and Manhattan station of the Pennsylvania railroad. The plans for the Grand Central station include an area of more than nineteen city blocks between Forty-second and Fifty-seventh streets, Madison and Lexington avenues, and will involve an expenditure of twenty to twenty-five millions. The stupendous project of the Pennsylvania railroad for building a tunnel under the Bergen hills, the North river, the island of Manhattan, the East river and Long Island City, is being carried out as rapidly as is consistent with practicability. The tunnels beneath both rivers will be of cast iron sections and lined with concrete, and every provision in the internal arrangement has been made for the safety of employes and passengers. The Manhattan station occupies the two blocks enclosed by Seventh and Eighth avenues, and Thirty-first and Thirty-third streets, the principal front being on Seventh avenue with the main entrance facing Thirty-second street.

No greater benefit could be conferred upon the country than the dissemination, by the Architectural League of America, of information in our municipalities. More rapid progress would be made if each profession worked for the development and advancement of the work of which that profession is particularly qualified to speak, without dealing in glittering generalities. For this reason, it is felt that the Architectural League of America could contribute more to the general good by concentrating the energy of its members upon the broad question of city plan.

The afternoon of Thursday was devoted to the excursion and luncheon, at which the delegates were the guests of the National Society of Mural Painters. After the luncheon the automobiles were again in requisition and a tour was made to many buildings of special interest on account of their mural and window decorations. These were explained frequently by the artists who had executed them. At the Church of the Ascension, while viewing the decorations by John La Farge, the artist himself was present, much to the gratification of all. The tour included the following: Broadway, Mendelssohn Glee Club, Fortieth street, and Grace church; Fifth avenue, Church of the Ascension; Washington square, Washington arch; Fifth avenue to Madison square; Madison avenue, new Tiffany studios, Tiffany house; Fifth avenue, Vanderbilt house, University Club, St. Regis hotel, Hunt Memorial, through Central park; Fifty-ninth street, Church of Paulist Fathers; Fifth avenue, to Waldorf-Astoria hotel; Madison avenue, Manhattan hotel.

Thursday evening there was a public meeting at the Fine Arts building, at which addresses were delivered by Prof. A. D. F. Hamlin and Hugh M. G. Garden. Professor Hamlin's subject was, "Relation of Decorative Sculpture to Architecture." The building is lifeless, he said, unless there are decorations. A structure may be grand without decorations, but it fails to stir the depths of our emotions. It was strange, he thought, that the builders should have outstripped the decorators, but such was the fact.

Hugh Garden's address was entitled, "Architectural Styles and American Life." At present there is a battle of styles and conditions, he stated. America has run the gauntlet, through the Gothics and the dear old Louises and the Colonial, which appears with hay fever regularity. In ten years the best houses are out of date and in twenty they are torn down. The accumulation which we tear down every year is worth millions of dollars; more than some other nations spend in the erection of new buildings. A building is the fruit of a man's nature, he went on. It is a mirror not only of himself, but of the whole people at any given time and place. The vain, tawdry and unseemly buildings reflect us. But there are a minimum of buildings which are sane, sound and wholesome. The existence of the two opposing sides denotes the war between the influence of the democratic idea and the threatened oppression of the dollar.

Friday's Sessions

By amendment the annual dues of undergraduate clubs were fixed at $10.

Motion to allow individual membership in the A. L. A. was referred to committee on publicity and promotion.

Mr. Ittner moved that the incoming executive board be instructed to look into the matter and have a recommendation ready at the next meeting for establishing a permanent corresponding secretary and providing for his compensation. Seconded and carried.

The committee on circuit exhibition reported as follows:

The committee recommends that the Circuit Exhibition as an exhibition be abandoned; its place to be taken by an annual exhibition of architecture and the allied arts; that it be held on the time and place of the convention; that medals or diplomas of honor be awarded for the most worthy work in architecture or the allied arts exhibited during the convention, which have been previously executed.

We further recommend that in case the above recommendations are adopted by this convention that a committee be appointed to complete the details of this exhibition scheme, working in conjunction with the incoming board and subject to its authority.

President Dunning moved that inasmuch as this is simply a recommendation to the succeeding executive board, and is not mendatory in any sense. We should pass it as a recommendation of the convention to the executive board and leave it to them to find ways and means of bringing this about, if they find it desirable to do so. Seconded and carried.

After much consideration of the architectural annual project as presented in the report of the executive board, all the recommendations of the executive board were adopted. In connection with the subject of the annual, the generous offer of Albert Kelsey to donate to the A. L. A. all his rights in the annual published by him for two years was accepted.

The special committee to receive and report on the reports of standing committees respectfully reported as follows:

1. *Executive Committee.*—Your committee has carefully considered the report of the executive committee and endorses the recommendations contained therein and urges their adoption.

2. *Education.*—The thoroughness with which the educational committee has done its work can not be too highly commended.

This committee recommends that its summary or comparative table be given wide publicity in that it is of value to all interested in architectural education and of particular value to the faculties of architectural schools.

3. *Publicity and Promotion.*—Your special committee in considering the report of the committee on publicity and promotion respectfully recommend that additional steps be taken to induce the non-affiliated architectural clubs mentioned in this report to join the league. In this connection we further recommend that particular efforts be made to induce the architectural societies established at the universities and colleges throughout the United States and Canada to become affiliated with the league, the well known policy of the organization being to foster in every way the education of the student and draughtsman. This will be materially simplified now that the status of the junior members has been clearly defined.

Your special committee endorses the recommendation that efforts be made to assist the architects and draughtsmen in the smaller centers to organize themselves into architectural clubs when possible, or to become eligible to the benefits of the Architectural League of America by becoming associated with some club already a member.

4. *Current Club Work.*—In the opinion of this committee the report of the committee on current club work contains many suggestions of value and we recommend that the report be sent to all organizations members of the league.

That especial attention be directed to the growing practice of giving architectural books to the winners of club competitions.

We recommend that wherever practicable league exhibitions be held at the time and place of the conventions.

We are surprised that the current work committee found such a woeful lack of support of the various clubs of the league by the older members of the profession, and we recommend that increased effort be made to gain their interest and support.

5. *Committee on Co-operation with the A. I. A.*—We recommend that the committee be instructed to work with the committee of the A. I. A. and adopt such means as may be deemed best to bring about the establishment of the scholarships in architectural schools.

6. The able report of the committee on civic improvement is a complete résumé of work done or projected.

In order to carry out the instruction of the last convention this should be supplemented by bulletins issued at intervals, giving current data and references relating to the subject.

Respectfully submitted, Wm. B. Ittner, S. E. Gladwin, Percy Ash, Albert Kelsey, J. C. Llewellyn, chairman.

Mr. Ittner moved that the recommendations of the committee on committees be adopted. Seconded and carried.

The selection of delegates to the International Congress of Architects at London next July was by motion referred to the executive board.

The motion prevailed that a committee be appointed to examine into the feasibility of several members joining in European travel to secure greater benefits and special terms.

The chairman of each of the standing committees was continued except that William B. Ittner was named chairman of the committee on co-operation with the A. I. A., and J. P. Hynes, chairman of the committee on current club work. N. Max Dunning was appointed chairman of committee on traveling scholarships.

The election of president of the league resulted in the selection of Ernest John Russell of St. Louis.

The invitation of the Washington Architectural Club to the A. L. A. to hold its next convention in Washington, D. C., was accepted, the time for this meeting to be determined by the Washington club.

After the usual votes of thanks, the convention adjourned.

ANNUAL DINNER, ARCHITECTURAL LEAGUE OF NEW YORK.

A fitting end to the convention was the elaborate dinner of the Architectural League of New York, at which the A. L. A. were guests. The gathering numbered about 250.

President Richard Howland Hunt of the New York League was the toastmaster, and behind him was a Blashfield sketch for a church mural painting. The banqueters continually gathered to study the work. The large painting of Albert Herter for the ceiling of the National Park Bank building shared the interest of the guests, and even while the speeches were going on many of the artists and architects were examining the exhibits.

President Hunt announced the winners of the prizes in the twenty-first annual competition of the league and the medals were presented at the dinner. The gold medal given for a design for a small chapel to St. Peter built on a rocky promontory was awarded to George A. Licht of New York. The silver medal for the same subject was given to Colister M. Craig of York, Pa.

The president's prize, a bronze medal for mural painting, was given to Hugo Ballin of New York. The subject was "The Conclusion of Peace After War." The Henry O. Avery prize for sculpture was taken away by Antonin C. Skodik of New York, the subject treated being a mural drinking fountain in a city street.

President Hunt announced that Mr. Avery would make his prize perpetual.

George B. Post made the address of welcome, and was followed by Ernest John Russell, president of the Architectural League of America.

The discussion of the civic improvement in art and architecture was opened by Frank Miles Day of Philadelphia. His theme was the treatment of the rivers of cities and the value of the artistic improvement of them. Sir Purdon Clarke told of the work in this direction which had been accomplished in London. F. Hopkinson Smith spoke satirically, inviting the visitors to New York to behold the architecture as displayed in the high buildings. He called them waffles stood on end, their windows being the port holes of commerce.

E. H. Blashfield spoke for the mural painters. He said that the three departments of building—architecture, painting and sculpture—were in reality one whole, but they were very far apart at present. Karl Bitter, representing the sculptors, echoed Mr. Blashfield's remarks.

William B. Ittner reminded his hearers that the A. L. A. was the pioneer in the widespread movement for civic improvement.

The dinner constituted the formal opening of the exhibition of the Architectural League of New York. There are about 700 exhibits in all, ranging from architectural designs and plans to municipal improvements, mural paintings, pictures, statuary, household utilities of beauty and other things related to architecture and the allied arts.

CHICAGO ARCHITECTS' BUSINESS ASSOCIATION.

On January 23 members of the association and guests to the number of 300 were taken on a tour through the Chicago tunnel or sub-way, an enterprise destined to become a valuable aid to the commerce of Chicago. Afterward the party were the guests of the association at a dinner, and listened to a description of the tunnel work by Engineer Jackson in charge of the construction.

He stated that in the construction fourteen inches of concrete is laid at bottom. Fifty-six pound rails are laid in recesses formed of timbers. On top of these timbers two-inch lagging is placed, then five-inch steel channels, weighing ten pounds to the foot, are placed three feet to centers. This is followed by two-inch by six-inch lagging and concrete rammed between lagging and excavation, filling all voids, and so on to completion.

ASSOCIATION NOTES.

THE ARCHITECTURAL LEAGUE OF AMERICA.

Upon the result of the competition for "The Architectural League of America Foreign Traveling Scholarship" will be awarded a scholarship in architecture allowing the recipient $1,200.00 to be spent in foreign travel under the conditions outlined by the A. L. A.

CHICAGO ARCHITECTURAL CLUB.

Funds for the Sixth Annual Traveling Scholarship have been subscribed by Fritz Wagner. The first drawings in this competition were exhibited January 29, and criticised by John B. Fisher. At the meeting of January 15 the subject of decoration was treated by Frederic Clay Bartlett.

It is the desire of the club to present to the public of Chicago recent examples of the best architecture. With this object the Nineteenth Annual Exhibition of the club will be held at the Art Institute, Chicago, from March 29 to April 18, inclusive, and will include works of architecture and the allied arts. Information for the guide of exhibiters can be obtained by addressing Otto A. Silha, Dexter building, 84 Adams street, Chicago.

SAN FRANCISCO ARCHITECTURAL CLUB.

San Francisco is now the proud possessor of an architectural club, which has grown wonderfully in the last four years and is now recognized as a permanent institution. An affiliation with the Architectural League of America has been consummated, and it is hoped the originality and ability of members may be felt throughout the United States through the medium of national competitions, etc. The club is ably presided over by Mr. George Wagner, and the remainder of the officers are as follows: Vice-president, A. O. Johnson; treasurer, A. R. Johnson; secretary, M. A. Schmidlin; directors, H. G. Corwin, T. Bearwald and J. H. Boehrer. Membership, 60. On every Monday evening a class in structural design is taught by Mr. Archer, one of San Francisco's leading engineers. On Friday evenings Mr. A. O. Johnson leads a class in rendering and design, both of which meetings are well attended. Business meetings are held on the first Wednesday of every month.

ILLINOIS CHAPTER, A. I. A.

The regular monthly dinner and meeting of the Illinois Chapter, A. I. A., was held at the Art Institute, on Monday, February 12, at 6 p. m. Mr. George Hooker, secretary of the City Club, addressed the chapter on the subject, "Municipal Improvements," with especial reference to Chicago. The speaker thought that Chicago had an opportunity presented to no other city in the creation of its new water front park of 200 acres. He advocated that this land be used largely for the location of public buildings devoted to the social and leisure side of life as against the commercial. He regarded as the more immediate subject for consideration the treatment of the Michigan avenue buildings facing the park, which he termed the principal facade of Chicago. It was urged that the architects formulate a plan for the permanent improvement of Michigan avenue, that individual and collective owners might have an ideal plan before them.

MUNICIPAL ART LEAGUE OF CHICAGO.

The Municipal Art League of Chicago invites designs for practicable electric lamp posts, to be delivered at the office of the league, club rooms, Art Institute, by February 27, 1906. These designs will be exhibited at the Art Institute. The park and city authorities will give them careful attention with a view to their adoption. Three prizes are offered by the league—$100, $75 and $50. Several of the daily newspapers have promised to publish pictures of the leading designs. Requirements, cost and utility will be considered, there shall be one light; height, 18 feet to center of light; material, bronze or fine cast iron; scale of drawing, one inch to the foot; there shall be a plan and a colored elevation; each design shall be signed with a cipher, the name of the maker not appearing on it; the name and the cipher shall be enclosed in an accompanying sealed envelope, addressed to the secretary of the league, this to identify the maker of the drawing after the prizes shall have been awarded. Jury of awards: Lyman A. Walton, president South Park Board; R. H. Warder, Lincoln Park superintendent; Dwight Heald Perkins, architect of public school board; Louis J. Millet, architect and decorator; Julia Bracken, sculptor. Ralph Clarkson, president; James William Pattison, secretary, club rooms, Art Institute of Chicago.

SOCIETY OF AMERICAN ARTISTS.

The twenty-eighth annual exhibition will be held in New York from March 17 to April 22, inclusive. Original works in painting and sculpture, not before publicly exhibited in the city of New York, and approved by the jury of admission, will be accepted for this exhibition. A work of art may be eligible for more than one of the following prizes:

The annual Webb Prize of three hundred dollars will be awarded for the best landscape or marine picture in the exhibition painted by an American artist, without limit of age, who shall not previously have received the prize.

The Shaw Fund will be devoted each year to the purchase from the exhibition of one or more works of art by American artists. These works will be chosen with the assistance of the jury and will become the property of Mr. Samuel T. Shaw, the donor of the fund. This fund will consist of one thousand five hundred dollars or more each year.

The Carnegie Prize of five hundred dollars will be awarded by the jury for the most meritorious oil painting in the exhibition by an American artist, portraits only excepted, the picture to be the property of the artist.

The Julia A. Shaw Memorial Prize of three hundred dollars will be awarded by the jury for the most meritorious work of art in the exhibition produced by an American woman who has not previously received the prize.

John La Farge, president; Henry Prellwitz, secretary.

ARCHITECTURAL LEAGUE OF NEW YORK.

A meeting of the Architectural League of New York was held in January, President Richard Howland Hunt in the chair; forty-four members and guests present, Messrs. Richard Watson Gilder, Kenyon Cox, James B. Townsend (of the New York *Herald*), Arthur Hoeber (*Globe*), David C. Preyer (*Art Collector*), being the principal guests of the occasion, and "The Elimination of the Present Tariff on Works of Art" being the subject for discussion. After dinner the president introduced Mr. Gilder as a veteran and a champion in behalf of free art for all the people.

Mr. Gilder spoke as follows: "In this question of duties on productions of the fine arts I was first interested in 1879-80, when I met in Paris American artists and art students to whom the national galleries and art schools of France were freely opened. The Americans whom our sister republic generously trained in the knowledge and practice of the arts, suffered the shame of knowing that the work of their living masters was, by a tax imposed in our custom-houses, either kept out of America or heavily burdened with tariff charges. Since 1880 this tariff has fluctuated—a part of the time to the extent of being entirely removed, without any results from removal at all disastrous to national interests, so far as I could ever learn. The fact that the protected class with virtual unanimity protests against such protection ought to be on this point conclusive evidence. Before an audience like this tonight it is hardly necessary to advance, in any detail, the arguments in favor of abolishing the duty on art. You know that a country without an inherited art should decidedly invite rather than obstruct its importation; you know the old artistic countries obstruct the *export*, not the *import*. But any law that obstructs the entrance into our country of works of the fine arts, any law which obstructs the education of our democracy through works of art, is a law oppressive of the workingman. By such a law you shut from his mind and spirit a little of that light of heaven without which our mortal lot is hard indeed. Such a law is a law against civilization."

Mr. Cox began by saying: "My purpose, at present, is to deal with the importance of Art in Education and the necessity to the artist of an educated public," and he then proceeded to point out that the education of the public would be very greatly furthered by the free importation of works of art, that the free admission of works of art for educational purposes is not sufficient, works of art imported by private individuals tending in a very few years after their purchase to become public property.

Mr. Preyer took exception with Mr. Cox as to the broad

and general importation of the good, bad and indifferent and the free admission of the lower grades of quasi-artistic productions, which might be called rubbish, and advocated a specific duty. To this both Mr. Gilder and Mr. Cox replied; the latter emphasizing the absolute value of works of art—not in direct proportion at all to money appraisal—and instanced the original price of the paintings by Franz Hals.

Mr. Townsend referred to certain inconsistencies of the tariff upon works of art—those from France, Germany and Italy being rated at 15 per cent, while similar articles from England, Holland and Austria were rated at 20 per cent.

Mr. Lauber differed with the previous speakers and spoke in behalf of the tariff, not only on paintings, but sculpture, mosaic and glass windows.

Mr. Bitter declared that he had not formulated any definite opinions on the matter, and he then cited as examples of the protection of national art—the Pharaohs of Egypt, kings of France and other ancient and medieval rulers. He then related the story of an American sculptor who has lived for sixteen years in Florence and who stated that there are mercantile interests there standing ready waiting for the removal of the tariff on art in the United States in order to establish branch offices throughout this country—to solicit orders which would be executed in Italy.

Mr. Cox replied that the French kings had frequently imported Italian artists; that the best results were attained in France by the long continued policy of inviting artists from everywhere and the world at large realized the commercial value to France of the application of this policy.

Mr. Cox then moved: Be it Resolved, that the Architectural League of New York favors the free importation of works of art and the abolition of the present tariff thereon.

NEW PUBLICATIONS.

VENTILATION OF BUILDINGS. By William G. Snow, S. B., Member American Society Mechanical Engineers, and Thomas Nolan, A. M., M. S., Fellow A. I. A., Assistant Professor of Architecture, University of Pennsylvania. Published by D. Van Nostrand Company, New York, 1906. Price, 50 cts.

This little volume of 84 pages is one of the Van Nostrand Science Series. It is in the nature of a primer, and treats the subjects in a condensed way. All branches of the subject are surveyed and commented upon with the purpose of explaining the general principles underlying each, and their application to buildings of all kinds. It is a popular treatise well adapted for the information of the busy architect and a text book for architectural and engineering schools.

THE ARCHITECTS' DIRECTORY AND SPECIFICATION INDEX FOR 1905-1906. Seventh Edition. Published annually by William T. Comstock, New York. Price, $2.00 net.

For many years this has been the standard and reliable directory of architects. It contains a list of the architects of the United States and Canada, classified by states and towns, indicating members of the American Institute of Architects. A list is given of the various architectural associations of the United States, with the names of the officers. The landscape and naval architects are also listed, the members of societies being noted. The building departments of the leading cities and names of the principal officers as given are of value for reference Each year adds to the completeness of this compilation.

THE SCHOOL HOUSE; ITS HEATING AND VENTILATION. By Joseph A. Moore, Inspector of Public Buildings, State of Massachusetts, 1905. Published by the Author. Roslindale, Boston, Mass.

In this work the writer gives the practical results, devoid of theories and arguments, of his experience of eighteen years as inspector of public buildings and inventor and supervisor of heating and ventilating apparatus, especially adapted to school houses of moderate size and cost. The book illustrates and describes plans by the author which formed an important part of exhibits that were given award at the Columbian Exposition, Chicago, 1893; the Paris Exposition, 1900, and the Louisiana Purchase Exposition, 1904, this last award being a gold medal. The Massachusetts requirements, which are very exacting, form the basis of the plans and tables given. There are 200 pages, with a carefully arranged table of contents and index.

ARCHITECT AND CLIENT*—Continued.

IN a new country like this the growth of taste in household art, and the appreciation of the right use of art work, come only with the growth of leisure and of wealth, but as culture, art and travel extend, the general perception of these things quickly takes root and grows apace, so that already the American connoisseur demands not only the possession but the daily use of articles of decoration, of almost every kind, which only a few years ago would have been cherished in some museum of the fine arts; and this is equally true of his home, his place of business, and his greater buildings devoted to public service and convenience.

However much artistic metal work may appeal to the trained intelligence of the architect as an effective element in his general scheme of decoration, it appeals still more, in the case of private residences, to the owner and, above all, to the lady of the house, as affording an opportunity where an educated taste and the judicious expenditure of money, yield a more effective result and a more lasting pleasure than can be procured at equal cost in any other way. The metal work used on a door, whether elaborate and costly, or simple but elegant, as the case may be, is like the jewel on a handsome costume, the latter serving merely as a background for the effective setting of the smaller but more costly ornament which it presents. The knobs, plates and hinges of a door *compel* attention by the prominence of their form, position and environment. If inappropiate and unpleasing they obtrude themselves upon all who enter or use the apartment; if handsome and in harmony with their surroundings, they arrest attention even more than larger and more pretentious articles of adornment which may surround them.

In continental Europe, especially France, these facts are always recognized, and hardware usually aims to be decorative. Personal observation, however, justifies the unqualified statement that today American hardware is superior in general qualities to that made in any other country, both in mechanical and in artistic design and execution, the only reservation being as to certain special and very expensive door and window fittings in which modern French work is perhaps still somewhat in advance, although even this reservation will not long need to be made.

The American architect and his client thus have an unparalleled range of choice of ornament from the wealth of designs which the American manufacturer has provided, with corresponding room for the exercise of tasteful discrimination, and have also the privilege of availing of what is mechanically the best and most convenient product of its kind in the world.

The average client does not know these facts, but the well-informed architect does, and the latter should see to it that they are brought to the attention of the former at the proper time and effectively, precisely as in the case of other details relating to a proposed building. Guided by experience, or by the information afforded by this volume, the architect should determine, *in advance,* the approximate cost of such hardware as his judgment indicates to be appropriate, should include this in his estimate of total cost, and, above all, should exclude the hardware from the general contract, reserving it for personal selection at the proper time, untrammeled by any previous contract or commitment. If the client is then disposed to increase the original appropriation, the architect will have the satisfaction of obtaining proportionately richer effects; but in any event he will be assured of having a fund adequate for the purchase of hardware which, however simple, will be appropriate and not incongruous with the other details of his own work. The condition most to be desired (*and to be sought*), at least in the case of important residence work, is that the owner shall join the architect in the inspection and selection of all important hardware, both of convenience and of ornament, and thus be led to subordinate the question of cost to that of obtaining the best and most appropriate material. The most successful combination for this purpose usually includes also "the lady of the house."

*An article forming part of "A Treatise on Locks and Builders' Hardware," by Henry R. Towne, president of the Yale & Towne Manufacturing Company, and past president of the American Society of Mechanical Engineers. John Wiley & Sons, publishers. Price, $3.00. It is the intention of the publishers of the INLAND ARCHITECT to publish other selections from this work. The book is profusely illustrated and contains more than 1,100 pages, 4x6½ inches.

THE NEW YORK CENTRAL'S TERMINAL WORK.

IN THIS number many illustrations are given of the architectural work connected with the stupendous rebuilding of the terminals of the New York Central Railway system in New York City. This work is in charge of Architects Reed & Stem and Warren & Wetmore. For two years the work has been in progress. While new tracks, a new terminal station and new motive power are being put in place the ever increasing tide of traffic flows in and out over the line as placidly as if nothing out of the ordinary course of railroading were going on.

Briefly, the work has been laid out in seven sections, viz.: Depression and enlargement of the main tracks and yard of the terminal proper, from Forty-second street to Fifty-seventh street. Erection of a new Grand Central station on the site of the present structure. Construction of the "Marble Hill cut-off" and the "Spuyten Duyvil rectification," near Kingsbridge. Depression of the Port Morris branch, with the elimination of all grade crossings thereon. Elimination of all grade crossings within the zone of electrification and the making of special station improvements. Four tracking of the Hudson and Harlem divisions. Electrification of all lines within the limits of proposed improvements.

In commenting upon this great undertaking the *New York Herald* states: Thus far most of the work has been done on the first section—the enlargement of the Grand Central yard. Here, besides taking in six blocks on the west side of Lexington avenue, which involved the demolition of many buildings, the present grade has been lowered about forty feet from Forty-third to Fifty-third street, so as to make room for two sets of tracks, one above the other, just as the "L" structure is built above the surface street car lines through Sixth avenue. The upper tracks, which will be used by through express trains, will be from fifteen to twenty feet below the present grade. Underneath this new yard, in a further depression of about twenty-one feet, will be the yard, tracks and station for the suburban service. In reality it is the building of one terminal above the other, both being far below the level of adjacent streets. In accomplishing this part of the work it has been necessary to construct several new sewers, to close many streets and do no end of work in the way of building new foundations for large buildings adjacent to the excavations. The Park avenue tunnel is to be enlarged through its entire length. South of Fiftieth street the plan of the new yard covers an area of thirteen city blocks between Lexington and Madison avenues, north of Forty-second street, an increase of six blocks over present conditions. So carefully have all the plans been made that when the work is completed the through express and suburban traffic will be entirely distinct the one from the other, so that suburban passengers arriving or leaving will never come in contact with those coming or going on the through trains. They will enter and leave the station on two distinct levels. Another great saving of time will be gained by the addition of loops, turn tables, supply stores and repair shops to the yard. Now, all through trains and often local trains have to be hauled through the tunnel to Mott Haven, a distance of five miles, for turning, cleaning, stocking and minor repairs. Under the new conditions all these will be taken care of in the Grand Central yards.

Special tracks and buildings will be provided for the express companies and the United States mail service. All this work, it is expected, will be completed by June, 1908. Then will begin the work of tearing down the present Grand Central station and the erection of a new one in its place. Throughout the general scheme of improvements the work on one section is to be substantially completed before another section is begun, and under this management five years may be required to do all that is planned. Covering nearly four city blocks and with its bewildering caverns, galleries and subterranean thoroughfares, the new Grand Central station will be unique among railroad terminals of the world. In fact, it will be larger than any structure of the kind now in existence. It will occupy nearly the entire area between Lexington and Madison avenues and will extend much further northward than the present station. The structure will be only 170 feet high, but is to be so constructed with domes and arches as to give it an imposing appearance. At first it was the plan of the company to erect a twenty-story building which would yield a revenue from office rentals, but it was finally decided that such a structure would not best serve the requirements of a great terminal station. Over the main train room and the baggage rooms from the main concourse north to Forty-fifth street, for the full width of the station, will be the railroad offices. This portion of the building will have a street frontage of 1,000 feet on Vanderbilt avenue, Forty-fifth street and Depew place. The design for the office quarters provides six stories, giving a total available office area of 250,000 square feet, exclusive of corridors. An interesting new feature of the station will be the new postoffice, in Lexington avenue, between Forty-third and Forty-fifth streets, the Lexington avenue facade centering on Forty-fourth street, which will be closed between Lexington avenue and Depew place. The postoffice building will rise over the mail and storage tracks, there being two platforms given up entirely to the mail service.

In the electrification of these lines many other changes are to be made. No doubt the most important of all will be the elimination of all grade crossings, which have been responsible for so many deaths and serious injuries in the last forty years. All told, fifty-eight miles of main line will be equipped with electricity. The power houses will be among the largest in the world and equipped with all labor-saving devices. Plans for new stations and the elimination of street grade crossings within the zone of electrification have been made and this work is already under way in some of these places. The terminal improvements, it is estimated, will require the expenditure of $70,000,000.

OUR ILLUSTRATIONS.

Cream of Wheat building, Minneapolis, Minn. Harry W. Jones, architect.

Residence for Frank F. Rozzelle, Kansas City, Mo., Shepard & Farrar, architects.

The Georgian Court Apartment building, Chicago. Borst & Hetherington, architects.

Residence of Charles M. Schwab, New York City, Maurice Hérbert, architect and decorator. Front and rear views are shown; also view in diningroom and in parlor.

Selections from the Twenty-first Annual Exhibition of the Architectural League of New York. Seven full pages are given.

Improvements for the New York Central and Hudson River Railroad. Grand Central Terminal Station and Postoffice building, New York City; Yonkers Power Station; Suburban stations, etc. Reed & Stem and Warren & Wetmore, architects.

Royal Insurance building, New York. Howells & Stokes, architects. Exterior and detail are shown. The new building for which the Royal Insurance Company is excavating is going to be one of interest among office buildings for several reasons. The location at the northeast corner of Maiden Lane and William street, is one of the most noticeable sites left in the Wall street district, and the exceptional shape of the land is unique owing to the fact that Maiden Lane crosses William street obliquely, which makes this corner an obtuse angle with two broad sides facing toward Wall street and Broadway respectively. This sixteen-story building is to be treated in general, as far as detail and application go, in a Palladian Renaissance style, with the three lower stories in white marble. Above this is a fourth story with a treatment half marble and half brick to mark the transition between the materials. The four upper stories are again white, treated as a crowning motive to the whole composition. The most noticeable thing about the exterior will be the study of the great entrance on the circular corner. The entrance motive will be four stories high, crowned with a clock dial surmounted with and supported by the arms of the Royal Insurance Company, all cut free-standing in marble. The plan of the interior is original in that the four elevators are grouped on three sides of a hexagonal elevator hall. The sixteenth floor and the greater portion of the ground floor are for the use of the Royal Insurance Company, the rest of the building being offices. As the subway is expected to eventually run down William street, the building will probably have a special entrance from the station at this corner.

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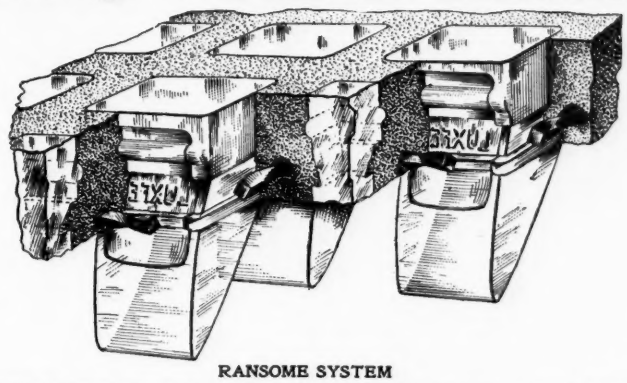

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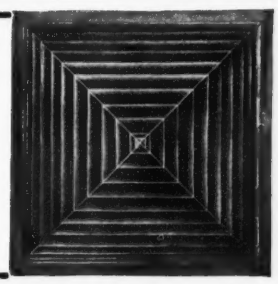

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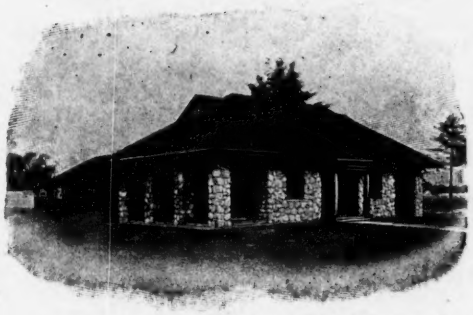

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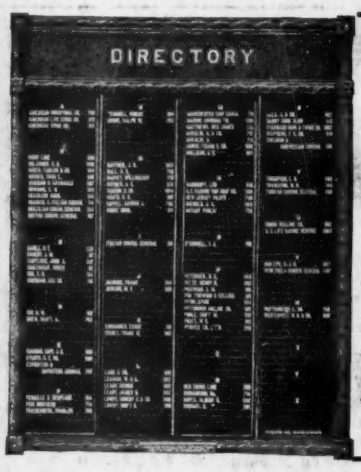

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